

AIR CONDITIONING & REFRIGERATION NEWS

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IN THIS ISSUE

Big or Little, It Will Help

"Grease-monkey" or "big operator?" There's still many refrigeration service men who operate a one-man business, and many of them do well at it. But there are also independent and dealer service organizations that are pretty big operations, employing many people. Either type of a service operator, we believe, will find much of value in the articles on pages 8 and 15, because they tell how to make a good business—better.

One More Month Until - - -

"The melancholy days are coming, saddest of the year—" meaning specifically that March 15 is only a month away. Twenty pertinent suggestions on making out income tax returns on your business will be found on page 4.

Is Yours an 'In-Line' Business?

Are your costs of doing business out of line? In his concluding article on "Selling Through the Dealer" H. M. Butzloff gives some average operating figures for two kinds of refrigerator dealers. Page 6. Next week we hope to present some more data on the breakdown of dealer costs.

6 Lessons In Trucking

"Six lessons from"—a transportation company that has had many hundreds of thousands of miles experience with refrigerated trucks. That's the big point in the "Refrigerated Truck Lowdown" story given on page 13.

If You Can't Sell It (Don't Give It Away)

If some old or obsolete equipment is cluttering up your shelves, why not try to move it with some stunt sale—say like an auction block, with "secret" bids, as did a refrigeration parts wholesaler in Los Angeles. His plan is told briefly on page 14.

What Now, What Then?

"After Peace, What?" Everybody is wondering what the economic effects of the "emergency boom" will mean in the near future, and later. Charles E. Wilson, president of General Electric Co., indicates what they may be, and has a suggestion for the "morning after" era. Page 12.

Iowa-Nebraska Light Co.

May Sell Properties

LINCOLN, Neb.—Iowa-Nebraska Light & Power Co., with headquarters here, has asked the Federal Power Commission for authority to sell nearly all of its electric utility system in Nebraska to Consumers Public Power district of Columbus, Neb., which already has purchased seven private power companies in recent months for a total of \$12,604,000. The purchase price for the Iowa-Nebraska company would be \$19,465,000.

The Iowa-Nebraska utility has been one of the leading retailers of electric refrigerators in the state. In addition to retail appliance stores in Lincoln and suburbs, the company serves 94 cities and villages in Nebraska and adjacent rural areas.

Propeller Fan Group Elects New Officers

ST. LOUIS—E. W. Petersen of American Blower Corp. is the new president of the Propeller Fan Manufacturers Association. Other officers are A. R. Stephan, DeBothezat Ventilating Equipment Co., vice president, and V. C. Shetler, Detroit, secretary-treasurer.

Used Box Trade To Latin America Reveals Market

Reconditioning Firm Finds Great Growth In Buying Interest

NEW YORK CITY—Shipments of reconditioned household refrigerators to South and Central America are at an all-time high, and the demand for low-priced mechanical refrigeration in Latin America is steadily increasing, according to S. Belasco, head of Interstate Refrigerator Corp. here.

In November, the firm shipped 300 reconditioned refrigerators to South America, is holding 100 units for shipping dates, and has orders on hand totaling approximately \$12,000.

Mr. Belasco attributes the increased demand in Latin American countries for reconditioned refrigerators to the fact that the South American market is similar to our market in this country, where the dealer is catering to the "low bracket" wage earner.

"This type of buyer," said Mr. Belasco, "does not, at times, want to be tied up with long-time payments, or has not the money to purchase a brand new refrigerator, but is convinced that mechanical refrigeration is a necessity instead of a luxury."

(Concluded on Page 19, Column 3)

Twin Freezers Feature Of Gale's New 'Eight'

GALESBURG, Ill.—Largest deluxe equipped model in Gale's household refrigerator line for 1941 is the Commodore 8, a unit of 8.75-cu. ft. capacity equipped with twin freezers providing both ice and frozen foods storage space. Freezer doors open individually, and are of velvet finish aluminum with polystyrene trim.

New cabinet design is characterized by smooth, flowing lines, curved top, and a wider, deeper food compartment door. Chrome plated grille at the base serves as a scuff-plate, and accentuates the cabinet design.

Interior equipment includes automatic light, heavy moonstone glass defrosting tray, sliding porcelain

(Concluded on Page 2, Column 4)

Merriam Dealers Fight Bad Trade Ethics

SCHENECTADY, N. Y.—Formation of a "cooperative group" to meet the problem of unethical competition in the sale of electric refrigerators and other major appliances was decided upon by representatives of the General Electric Specialty Dealers' Organization in the territory of A. Wayne Merriam, Inc., distributor, at a meeting here Feb. 4.

Purpose of the cooperative group will be "to publicize and more fully identify the General Electric appliance dealer's store as the store in his community where the public can be assured of value, and to simultaneously carry out coordinated plans for profit protection and the display,

(Concluded on Page 2, Column 3)

Electrical Wholesalers To Meet May 18-22

NEW YORK CITY—The thirty-third annual convention of National Electrical Wholesalers Association will be held at the Homestead, Hot Springs, Va., May 18 to 22, reports E. Donald Tolles, managing director.

Victor Deissler Still Missing; 7-Day Search Turns Up No Clues

GREENVILLE, Pa., Feb. 10—Victor G. Deissler, head of the Deissler Machine Co., who was spirited away from the company's offices Sunday night, Feb. 2, after having apparently been beaten and robbed, was still missing today, with no clues of any consequence having been found since the day following his disappearance.

At that time his new automobile was found in Youngstown, Ohio, some 30 miles from here, and his suitcoat and hat were discovered in the car. However, the combined efforts of city and county police authorities, the Pennsylvania State police, and the F.B.I., have failed to turn up any further trace of the missing commercial refrigeration manufacturing executive.

Mr. Deissler had returned to Greenville on Feb. 2 from a business trip, and told intimates that since it was Sunday he was going to the office to put some \$600 which he had on his person in the office safe. He was not heard from again.

Bloodstains were found on the floor of his office, which was in considerable disarray, and Mr. Deissler's desk chair had been pulled near the door. A heavy iron bar was found on the floor nearby.

Direction of affairs at the Deissler company plant since the disappearance of the president are under the direction of Frank Deissler and K. E. Unger.

Nema Comm. Volume Over \$24,000,000

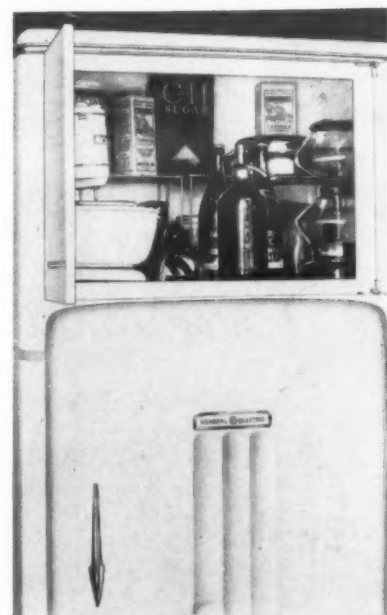
DETROIT—With packaged equipment and condensing units under 1 hp. leading the way with volumes well over prior-year figures, world shipments of commercial refrigeration equipment by members of National Electrical Manufacturers Association reached a total of \$24,389,611 in 1940, as compared with \$22,454,131 in 1939.

Shipments to distributors and dealers in the U. S. alone were valued at \$22,053,632 during the year, a two-million-dollar gain over the 1939 total of \$20,023,175.

Shipments of commercial condensing units exclusive of those in self-contained equipment by Nema firms during 1940 totaled 116,585 units valued at \$9,557,950, compared with 104,268 units valued at \$9,161,180

(Concluded on Page 2, Column 5)

G-E's Newest 'Topper'



Storage space for the small kitchen is provided in this accessory cabinet, built to fit atop any G-E 6-foot refrigerator of the last five years. Styling matches the refrigerator.

Servel 'Supermetic' Hermetic Model Shown In East

NEW YORK CITY—The field serviceable "Supermetic," new hermetically sealed commercial refrigerating machine made by the Servel, Inc. Electric Refrigeration & Air Conditioning division, made its formal bow to the trade at Servel's annual eastern convention here last week.

In outlining the factors which led Servel to embark on production of hermetic units, Harry Newcomb, general manager of the Electric Refrigeration & Air Conditioning Division, pointed out that for some years there had been a trend toward more self-contained fixtures, which has brought demands in design for compactness and freedom from field service.

"The hermetically sealed unit," said Mr. Newcomb, "has two pronounced advantages—first, it can be made more compact than conventional units, and second, it eliminates the shaft seal, which while not a major problem with us, is admittedly a potential source of refrigerant loss and mechanical trouble on a percentage of all machines."

Mr. Newcomb traced the development of the design features incorporated into the "Supermetic" from

Toronto's Show To Open March 17

TORONTO, Ont., Can.—Second annual refrigeration convention and exhibition, sponsored by the Toronto Maple Leaf chapter of Refrigeration Service Engineers Society, will be held at the King Edward hotel here March 17 and 18.

In addition to a showing of new equipment and accessories by many manufacturers, the two-day program will include educational sessions covering a wide variety of technical topics of interest to refrigeration service men, and a soldering contest between representatives of the London, Ottawa, Montreal, and Toronto R.S.E.S. chapters.

Twenty-seven manufacturers and jobbers had displays at last year's meeting, and this year provision has been made for approximately 55 exhibitors, reports T. W. Savill, secretary of the Maple Leaf chapter.

Topics scheduled for discussion at technical sessions include beverage and water cooling, cold plates and their application, refrigerant controls and water valves, expansion valves, heat exchangers and their application, commercial coils and their application, driers and drying agents,

(Concluded on Page 19, Column 3)

REA Assailed as Aid To 'Direct Buying'

PITTSBURGH—A resolution assailing the Rural Electrification section of the Department of Agriculture for "presuming" that their projects should pay 20 to 30% less for appliances than other customers pay, and for "encouraging" these rural customers to eliminate the retailer and buy direct, was adopted at the closing session of the Pennsylvania and Atlantic Seaboard Hardware Association convention at the William Penn hotel.

Other resolutions attacked all sales practices which eliminate the retailer, pledged resistance to any unjustified price rises, favored the Patman chain store tax bill now pending in Congress, and called for "drastic economies" in the normal operations of government to offset defense expenditures.

Subcontractors In Limelight At 'Defense' GHQ

Small Manufacturers Sought As Nation Prepares For 'Shooting War'

By George F. Taubeneck

WASHINGTON, D. C.—This nation may stay out of war, but the people who are running our government today aren't taking any chances. Every decision made in Washington today is predicated on the assumption that we may be in a "shooting war" within six months. All plans are being made toward that end.

"We are going to double the load." You hear that from everybody. That means, instead of housing, refrigeration facilities, and equipment for an army of 1,400,000, they are preparing to order facilities and equipment for an army of 2,800,000.

That means, also, for every square foot of productive floor space now at defense contracts, another square foot may be added.

And that's only the beginning. If you have a plant that can make anything—but aren't yet at work either on a contract or a subcontract for the army or navy—your chance is due to arrive within a few weeks.

This information—plus that which will follow—was gleaned from off-the-record interviews with many "bigwigs" in Washington last week, including such men as Vice President Henry Wallace, Senator Walter F. George (chairman, foreign relations committee), Representative Sam Rayburn (Speaker of the House), Philip Murray (president of the C.I.O.), Dr. H. A. Millis (new chairman of the National Labor Relations Board), and a number of important men in the Office of Production Management.

These "OPM" executives included such widely known business men as Donald Nelson, Averill Harriman, Stacey May, Mason Britton, Francis Trecker, and John Biggers.

What about priorities? The refrigeration industry need worry only about aluminum this season. Steel capacity appears to be ample for the time being. There will likely be a shortage of electric-furnace steel, but that shouldn't concern the refrigeration industry too much.

And now about subcontracting: Within two or three weeks a nation-wide "Defense Subcontracting Service" will be announced. (This is a scoop for the NEWS.) It will

(Concluded on Page 20, Column 3)

St. Louis Dealers Sponsor Popular Radio Program

ST. LOUIS—"The Land We Live In," the midwest's only appliance-dealer-sponsored radio program, will be featured for six weeks during the coming spring. Broadcast weekly over KMOX, the program deals with midwestern pioneer developments, and is sponsored by 116 major appliance dealers in St. Louis and suburbs, and eight distributors, with Union Electric Co. as co-sponsor. Popularity polls have shown it to be one of the leading local programs.

B. Bowe To Manage G-E Dept. Store Appliance Sales

BRIDGEPORT, Conn.—Ben Bowe, formerly St. Louis district manager for General Electric Co., has been named to G-E's newly created post of manager of department store appliance sales. In his new capacity, Mr. Bowe will make his headquarters here.

When Engineers 'Lobbied' In Kansas City



Alonzo P. Kratz, research professor, University of Illinois; E. John Rodee, John B. Pierce Foundation, New Haven, Conn.; Ferdinand Jehle, Hoffman Specialty Co.; and C. Tasker, Ontario Research Foundation, Toronto, Canada, at the social hour preceding the annual A.S.H.V.E. banquet during the society's recent convention in Kansas City.



James B. Fullman, A. M. Byers Co., Pittsburgh; R. K. Thulman, F.H.A., Washington, D. C.; H. R. Randolph, International Heater Co., Utica, N. Y. discuss the use of radiant heating in small homes at A.S.H.V.E. convention.

Fogel Will Reveal Expansion Program

PHILADELPHIA — Details of Fogel Refrigerator Co.'s "expansion program" for 1941 will be outlined to members of the national dealer organization at the annual sales convention here Feb. 22 at the Broadwood hotel.

Fogel commercial refrigerator models for 1941 will be unveiled at the meeting, which will be concluded with a dinner and show in the hotel. Demonstrations and motion pictures will be used to outline various construction and sales features. On the basis of advance reservations made by dealers, this year's meeting is expected to be the largest in Fogel's 42-year history, officials report.

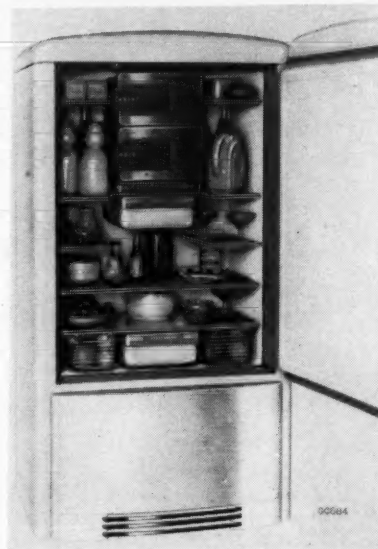
Merriam Dealers Act To Curb Bad Trade Ethics

(Concluded from Page 1, Column 2) merchandising, and promotion of General Electric appliances."

Membership in the cooperative activity is open to all G-E dealers in the Merriam territory. An organized dealer group, it was felt, would be able to accomplish desired results much easier than an individual dealer.

An executive committee, composed of the 12 members of the relations and merchandising committees of the Merriam appliance dealers organization, will be responsible for recommending sales plans, policies, and promotions to the cooperative group.

Gale Model Has 'Twins'



Gale's "Commodore" 8-foot unit has a two-door freezer, deluxe equipment and shelving.

Many Features Crowded Into New Gale 'Eight'

(Concluded from Page 1, Column 5) meat drawer, glass covered crisper, twin wire baskets, and vegetable bin. Shelf area of the unit is approximately 18 sq. ft., with four clip shelves, offset shelf, sliding full width shelf, and half-glass utility shelf.

The unit is powered by Gale's "Mechanical Iceberg" hermetically sealed unit, with equalizer to prevent motor overload and overheating, and the new "fluid cooled" condenser.

McQuay Advertising Directed By Fox

MINNEAPOLIS — McQuay, Inc., Minneapolis manufacturer of industrial, commercial, and domestic air conditioning equipment has appointed Edward M. Fox as advertising manager.

Mr. Fox, before coming to McQuay, Inc., was associated with the advertising department of the Minneapolis Journal for 10 years, the Milwaukee Sentinel, and more recently with the L. E. Waterman Co. of Newark, N. J.

Mr. Fox will work closely with the Addison-Lewis Associates, advertising agency for McQuay, Inc., in developing new markets for several new products which are to be announced early this year.



EDWARD M. FOX

Package Units Top Nema Comm. Gains

(Concluded from Page 1, Column 3) during 1939. Condensing unit shipments to dealers in the U. S. amounted to 104,038 valued at \$8,564,084 during the year, against 88,191 units valued at \$7,836,674 in 1938.

Pacing all commercial products in dollar volume for the year were ice cream cabinets, shipments of which totaled 35,453 units, valued at \$5,515,533. This compares with 34,860 units valued at \$5,391,392 in 1938. From a unit-sale standpoint, beverage coolers led the way with 52,314 units, compared with 34,627 in 1938. Value of shipments was set at \$4,856,256, as against \$3,450,305.

Shipments of pressure water coolers totaled 22,112 units, as against 18,618 in 1938, with dollar volume of this equipment increasing to \$2,238,270, compared with \$1,854,137 in the previous year. Bottle water coolers were down from 1938 totals in both unit sales and dollar volume, sales totaling 3,303 units, against 4,966 in 1938, and value dropping to \$232,352, against \$332,190.

Foreign sales of Nema condensing units for use separately were far off their 1938 mark, the 1940 report showing shipments of 9,820 units valued at \$772,413, against 14,287 units valued at \$1,149,678 in the year previous. Canadian shipments were up to 2,727 units valued at \$221,453.

World volume of Nema commercial shipments during December reached \$1,662,499, compared with \$1,402,165 in 1938, and shipments to U. S. firms were up to \$1,350,481, against a volume of \$1,264,011 in the preceding year. Beverage coolers led in both unit and dollar volume, with 4,151 units valued at \$359,517, compared with 1,160 units valued at \$98,998 in the same month of 1938. Pressure water cooler shipments totaled 1,208 units, compared with 633, while ice cream cabinets fell below the 1938 mark of 2,175 units for the month, with a 1,530-unit total.

Condensing unit shipments were below the 1938 mark in units, 7,105 units to 9,504 in 1938, but led the prior-year total in dollar volume.

Adds Westinghouse

DALLAS, Tex.—Haverty Furniture Co. has added Westinghouse appliances to its home equipment line.

SPECIFY
Virginia
REFRIGERANTS

VIRGINIA SMELTING CO.
Located at Tidewater
WEST NORFOLK • VIRGINIA

FRANCHISES NOW AVAILABLE

Carrier AIR CONDITIONED Refrigeration

Complete Line to Meet All Refrigeration Needs

• Don't delay. At the present time, Carrier has open a few Franchises in important refrigeration centers. Write in now to find out if your territory is available. Carrier offers a complete line of refrigeration so that your salesmen can sell a wider group of prospects, and sell them *more easily*. Lines open include famous Carrier Freon Compressors from ¼ to 50 tons! Cold Diffusers of all

types from 1/10 to 26 tons! Evaporative Condensers from 2 to 40 tons! A complete line of Packaged Refrigeration, including Beverage Coolers, Reach-in Refrigerators, Display Cases, Ice Makers, Milk Coolers and Water Coolers! All refrigeration for locker storage! And complete Self-Contained Refrigeration for trucks! Remember—only Carrier offers

you the experience gained through 51 years of manufacturing refrigeration for use on land and sea...experience in providing refrigeration for 90% of the ships afloat...experience in installations throughout 99 countries of the world! That means greater sales—less worry—increased prestige—more profits.

*Keep busy in your
slack seasons. Act Now!*

Scores of successful dealers throughout the country have discovered in Carrier Refrigeration an opportunity for year 'round profits. You can do the same. Without obligation, fill in the coupon below. We will send you at once all details on these products together with information on Refrigeration or Air Conditioning Franchises available for your territory.

CARRIER CORPORATION, SYRACUSE, N. Y. Desk B12
"Weather Makers to the World"
(In Canada, 39 Bloor St. West, Toronto, Ontario)
Please send complete details on the new Carrier Dealer Franchise for Refrigeration.

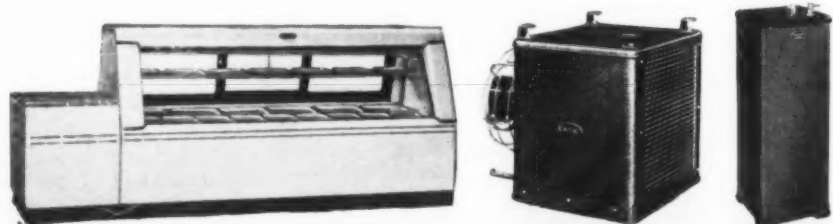
NAME.....
ADDRESS.....
CITY.....



Evaporative Condenser

Truck Refrigeration

Condensing Unit



Display Case

Cold Diffuser

Water Cooler

WE KNEW WE HAD A WINNER

—but we didn't know it was this good!

WHEN we announced the Leonard 1941 line we knew we had a great product and an unique franchising program. But we didn't know what a sensation Leonard would prove to be. Now you've seen the 1941 products and prices, and the whole industry knows:



"Leonard today offers a combination of beauty, advanced features and value unbeatable in the entire refrigeration field!"

The long list of Leonard features includes the exclusive Stainless Steel Door Strip, exclusive 5-Way Presto Shelf, glass-covered sliding Crispers and Cold Chest and the many other conveniences listed below. And the new Hi-Humid models have all-glass shelves, all-glass freshener compartment and an entirely new system of refrigeration. Cabinets are big, over-size 6¾ and 8¾ cu. ft. sizes.



"Leonard simplifies the inventory problem—a complete line in only seven logically spaced models!"

There are only five 6¾ cu. ft. and two 8¾ cu. ft. models, with prices and features planned to cover all income brackets and to provide for easy step-up selling. *And with greater value built into every model, prices are as much as \$30 lower than last year.*



"Leonard's franchising plans give opportunities for real volume—with proof that you can make real money!"

Leonard franchises are planned for retailers who want real volume, real opportunities, and real profits. And Leonard gives PROOF of what representative Leonard retailers—appliance stores, furniture businesses, auto accessory houses, department stores, and others—have accomplished, and what you, too, can do! The full details are in the 1941 Leonard Plan Book.

Write or wire about the Leonard franchise to the Sales Dept., Leonard Division, Nash-Kelvinator Corp., Detroit.



"Here's the best-planned 'Step-Up' Line ever offered—Assuring Volume Sales Where Dollar Profits are Greatest!"

FROM
EVERY ANGLE
THERE'S NOTHING BETTER!



"Leonard's Hi-Humid Models represent a great advance in the industry"

This model LH-6 is something brand new in refrigeration. In addition to the coils that freeze ice, there is a separate set of refrigerating coils in the back, side walls and bottom of the food compartment, maintaining correct humidity and temperature throughout. No need to cover dishes. The glass-enclosed Hi-Humid Food Freshener compartment provides super-moist conditions for leafy vegetables and similar foods. With New Stainless Steel Door Trim and all basic 1941 Leonard features.

Only \$179⁹⁵*
MODEL LH-8—in 8¾ cu. ft. capacity \$209⁹⁵*

Best-planned "Step-Up" Line ever offered!

MODEL LSS-6—Big 6¾ cu. ft. size! New gray door opening trim. Big moonstone glass Chill Tray under Freezer Unit. Two extra-fast freezing shelves. Porcelain Interior. New Automatic Len-A-Light. Only \$114⁷⁵*

MODEL LS-6—Has features of LD-6 plus 5-Way Presto Shelf. 30% bigger, glass-covered, sliding Crisper. Moonstone glass Meat Chest with glass cover. Vegetable Bin. Sliding half shelf. Only \$139⁹⁵*

MODEL LD-6—Has all features of model LSS-6 plus sliding Leonard Crisper with porcelain top. New Stainless Steel door opening trim to replace old-style breaker strip. Moonstone glass Cold Chest. 4 Pop-Out ice trays. Only \$124⁹⁵*

MODEL LR-6—Has features of LS-6 plus 50% more ice. Not one but two glass-covered sliding Crispers. Double width Dessert Tray. Deluxe styling. Only \$154⁹⁵*

MODEL LS-8—Same as LS-6 except 8¾ cu. ft. size. Only \$179⁹⁵*

*Prices suggested are for delivery in the kitchen with 5-Year Protection Plan. State and local taxes extra. Prices slightly higher west of the Rockies.

LEONARD

the Opportunity Line!
FOR 1941!

20 Ways To Keep Tax Costs Down

Things the Refrigeration & Air Conditioning Dealer Can Do To Effect Taxation Economies

By Arthur Roberts

Taxes are now a major expense. The refrigeration and air conditioning dealer should take every lawful means to keep them at minimum. These 20 suggestions should be helpful in the attainment of that objective.

1—Make each year's return complete in itself. Expenses and liabilities overlooked in one year cannot be deducted from the income of the next.

2—Loss incurred in any business transaction is ordinarily deductible from gross income, providing it is a closed transaction during the taxable year with full consideration for salvage and other compensation received.

WATCH DEPRECIATION

3—Deduct sufficient depreciation. A taxpayer is NOT permitted to take advantage in later years of his prior failure to take any depreciation allowance or to adjust an inadequate allowance made under the known facts of prior years. The computation of depreciation is more an accounting problem than one of tax. Use the method that most accurately reflects wear and tear on the equipment and buildings owned and used in the business. A taxpayer is not limited to any one method as long

as the depreciation allowance is reasonable. If a taxpayer wants to switch from one method to another, it is necessary to get the consent of the Commissioner of Internal Revenue.

4—Do not depreciate land. Deduct the cost of the land from the value of the real estate, if land and buildings are combined on the books.

5—If returns are filed on an accrual basis, all accrued items, which are expenses due but not yet paid, should be pro-rated to the end of the taxable year and deducted.

WHEN TO PAY BILLS

6—If returns are filed on a cash basis, try to pay all current bills during the taxable year so that the expenses may be deducted from the income of that year. Sometimes, the economies thus effected make it advisable to borrow money to meet these obligations.

7—Deduct for equipment scrapped to make room for modern units in showroom or shop, or delivery equipment. The tax economies possible through such deductions are additional to the other monetary advantages of modernization. "Profits rise when you modernize," even from the standpoint of tax. Loss through the demolition of all or part of a

building incidental to modernization may be deductible from gross income.

8—Deduct for obsolescence whenever permissible. That which shortens normal life is obsolescence. In these fast-moving days, equipment may become obsolete faster than it depreciates from ordinary wear and tear. There are two kinds of obsolescence, accrued and anticipated, the latter deductible annually with depreciation.

Accrued obsolescence, sometimes called forced obsolescence, may be deductible in full, being the difference between the depreciated cost of an asset and its salvage or trade-in value. However, such deductions are usually incidental to renewals and replacements.

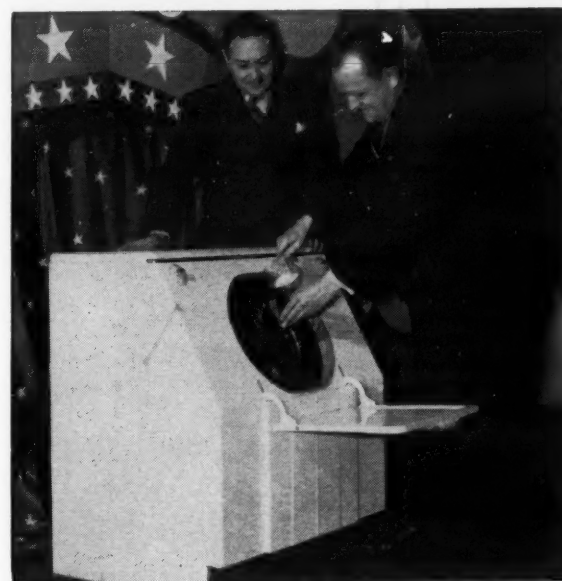
FIGURING INVENTORY

9—Figure inventory on merchandise and supplies at cost or market, whichever is lower. If your inventory is inflated, profits will be higher on paper but taxes higher in real money.

10—Take the permissible credit for a loss carry-over. The 1939 amendment to the Internal Revenue Code allows the taxpayer to carry over losses sustained in 1939 as a deduction from 1940 income, and if the loss is greater than 1940 income, the excess may be carried into 1941. Such losses may extend for two years.

11—Do not capitalize maintenance expense. For example, a dealer may make repairs to his building totaling \$400, then charges this expense to his property account because, by increasing the book value of his building, he makes his balance sheet look sweeter for credit purposes. Such entries increase the tax. Re-

'Soaping Up'—1941 Style



"The soap goes in this little door," says T. J. Newcomb (right), manager of the laundry department, as he demonstrates the new Westinghouse automatic cycle "Laundromat" washer to Frank R. Kohnstamm, merchandise sales manager. The housewife has only to load the washer with soiled clothes, add soap and water softener, and set two dials.

pairs that keep a property in ordinarily efficient operating condition are an expense. There are borderline cases of this type, which may be considered an increase in capital or an expense. Be conservative in capitalizing all items, which logical argument will support as expenses. This will keep down tax.

12—Deduct for bad debts when it can be reasonably substantiated that they are worthless. If you collect on such write-offs in subsequent years, you must include the payments with "Gross Income." Because you reduce your taxes by writing off bad debts, you must reimburse the Treasury Department, if any or all debtors pay up subsequently. However, try to write off bad debts in a year when there is a profit, or in other words, a taxable income so that if there is later recovery to be included as income, you will at least have benefited by the tax deduction in the first place.

For example, if a dealer loses \$500 in 1940, he pays no tax anyhow. If he should write off \$500 in bad debts in 1940, he shows a loss of \$1,000 and pays no tax hence, gets no benefit of deduction from the write-off, yet, should he collect all or some of the \$500 in bad debts in later years, he may have to consider it part of income and pay a tax on it. In this way, the same \$500 is computed twice as gross income without a corresponding deduction for the \$500 write-off and, in effect, obligates the taxpayer to pay tax on the same income twice.

13—Amounts paid because of injuries received by employees are proper deductions as expenses, limited to the loss not covered by insurance or otherwise.

KEEP ACCURATE RECORDS

14—Keep accurate accounting records. Faulty bookkeeping procedure makes tax economy difficult. Often small expenses are paid out of cash and never recorded, hence, may not be deducted from gross income. In the aggregate, over the year, these petty outlays may total a sizable sum. Dealers should handle petty cash disbursements systematically, by means of a "Petty cash fund." This fund is a big help in keeping down tax.

15—Do not wait until the day before filing time to prepare a return. In the haste, essentials to tax economy may be overlooked. Omissions are costly. Consider your tax

problems in advance of filing dates and in some instances, it is necessary to take certain action during the calendar year if you wish to get certain deductions. Consider your tax problems throughout the year the same as other expenses. The taxpayer cannot afford to forget his taxes until filing time any more than he can forget other expenses until the end of the year and then settle up in a lump sum without further ado.

16—Set up a reserve for taxes at the beginning of each year, thereby charging each month with its pro-rata share of the annual tax expense, otherwise, the months in which taxes are paid will be charged too heavily with this expense. A reserve spreads the tax expense evenly over the 12 months.

AVOIDING TAXATION

17—When a transaction may be interpreted in two different ways, use the interpretation in your favor. This is not tax evasion. It is tax avoidance. There is a difference. The Supreme Court has ruled that, "The legal right of the taxpayer to decrease the amount of what otherwise would be his taxes or altogether avoid them, by means which the law permits, cannot be doubted. It is well settled that a taxpayer may resort to any legal methods available to him to depreciate the amount of his tax liability, so long as his efforts are confined to law."

18—Keep a tax calendar showing due dates on taxes, when returns are mailed, payments made, total tax due, etc. This calendar should cover all taxes, Social Security, sales tax, Federal and state income taxes, etc. With 35 states having some form of income tax law, about 25% levying a "use" tax, about 75% requiring returns of some kind plus Federal taxes, the taxpayer should record his taxes in as concise a manner as possible, thus simplifying analysis at any time. This record, of course, is supplemental to the book records.

19—Salaries paid to the owners of a corporation for personal services actually rendered can be charged as business expenses for the year and deducted from income. This cannot be done in an unincorporated business or partnership.

20—If in doubt about your ability to effect all possible tax economies, get expert guidance from an accountant, tax practitioner, your banker, or the local office of the Internal Revenue Department.

A SMALL SEAL WITH A BIG MEANING

As the "Sterling" trade mark on a piece of silver is a symbol of outstanding merit, the Bonderite label on any product means the last word in finish protection.

More than that, it indicates that it was made by a manufacturer who wants to give extra value to the user. It indicates the type of manufacturer who uses only the best raw materials the market affords. It indicates that careful research and testing is back of every unit. It is an indication that every part was carefully made.

The finish on all refrigerators may look alike when they leave the factory. But as the years go by, in the user's kitchen, humidity gets in its work. The Bonderized cabinet stays bright and clean. Rust is defeated and enamel remains intact. Dealer service costs are lowered. The owner is better satisfied.

If the refrigerator, washing machine, or other product you sell carries the Bonderite label, it gives you an extra selling feature. Buyers know its value. It is to your advantage to bring it to the attention of every prospect.

PARKER RUST PROOF COMPANY
2197 E. Milwaukee Ave. • Detroit, Michigan

PARKER
Processes CONQUER RUST
BONDERIZING • PARKERIZING

The Great Middle WEST

85%

Has Chosen Jarrow

Over 85% of all the recognized refrigeration jobbers in the Middle-Western States have endorsed the superiority of Jarrow door gaskets by handling them exclusively. These impartial experts, who know what the trade wants, prove that Jarrow products are the best that you can buy.

Manufacturers and servicemen know that Jarrow door gaskets are priced right and fit better because they are engineered to give better service. Try Jarrow yourself on your next regasket job. Jarrow gaskets will service over 90% of all refrigerators and cooling rooms in use.

Get Jarrow Gaskets from your jobber.

THE MOST COMPLETE LINE OF REFRIGERATION GASKETS AND SPONGE RUBBER INSULATION.

JARROW PRODUCTS

Factories: Chicago and Grand Rapids
General Office—420 N. LaSalle Street, JARROW PRODUCTS, Chicago, Illinois

Manufacturers: SEND US YOUR SPECIAL GASKET PROBLEMS.

Who's Who Where

M-H Names Warmee Promotion Manager



ROY H. WARMEE

MINNEAPOLIS—Roy H. Warmee has been appointed sales promotion manager of Minneapolis-Honeywell Regulator Co., with headquarters here, reports C. B. Sweatt, vice president in charge of sales.

Mr. Warmee was formerly sales manager of the Philadelphia Coke Co., Philadelphia, and is widely known in sales circles. In 1937 he won the National Howard G. Ford award for outstanding achievement in sales management, and at the present time is national chairman of the 1940 award.

Little Appointed Nash Advertising Manager



H. G. LITTLE

DETROIT—H. G. Little has been appointed advertising manager of the Nash division of Nash-Kelvinator Corp.

Mr. Little, a former vice president of Lord & Thomas advertising agency, comes to Nash from Cincinnati, where he was manager of the office there of Roy S. Durstine, Inc. advertising agency, a post he assumed after leaving Lord & Thomas in 1939.

During his association with Lord & Thomas, Mr. Little from 1916 to 1935 handled Pacific Coast activities of the agency from its Los Angeles and San Francisco offices. In 1935 he was placed in charge of the Dayton, Ohio office, and for several years directed the agency's operations for Frigidaire. With the Durstine agency, he was in charge of the Crosley Corp. account.

Sheehan Joins Hussmann Sales Promotion Dept.

DETROIT—H. A. Sheehan, formerly district manager for General Refrigeration Co. in five states, with headquarters here, has joined Allied Store Utilities Co., manufacturer of Hussmann-Ligonier cases and coolers, in a sales promotional capacity.

Mr. Sheehan had been with the Lipman organization in Buffalo, Cleveland, and as manager of the New York branch office before coming to Detroit as district manager for the company. He will continue to headquarter here in his new position.

Public Service Promotes Baumgarten, Pesveye

NEWARK, N. J.—John A. Baumgarten has been promoted to general electrical appliance sales representative of Public Service Electric & Gas Co., and Frank C. Pesveye has been named to succeed him as general sales promotion representative. Mr. Baumgarten succeeds Edmund S. Stevens, who died Dec. 22.

With the company since 1921, Mr. Baumgarten has served as appliance sales representative, assistant general merchandise representative, general representative of merchandise personnel, and sales promotion manager.

Mr. Pesveye has served since 1926 as stenographer and assistant to the general merchandise representative.

Westinghouse Appointee



VALE E. FREELAND

Head of department and furniture store sales of Westinghouse's merchandising division.

Freitas Will Represent Alco In N. Texas

ST. LOUIS—Appointment of Leo J. Freitas, 4408 Stanhope St., Dallas, Tex., as representative of Alco Valve Co. in north Texas and Oklahoma has been announced by R. S. Dawson, Alco sales manager.

Mr. Freitas formerly was manager of the Dallas factory branch of Peerless of America, Inc., and is well known in that territory.

Harrisburg Refrigeration Is Organized

HARRISBURG, Pa.—Organized to deal in electric refrigerators and air conditioning equipment, Harrisburg Refrigeration Co., 121 S. Second St., has been granted a state charter by the Secretary of Commonwealth's office. Incorporators are Spencer G. Hall, Adolph S. Benson, and Fae P. Hocker of this city.

Weisheit Steps Up

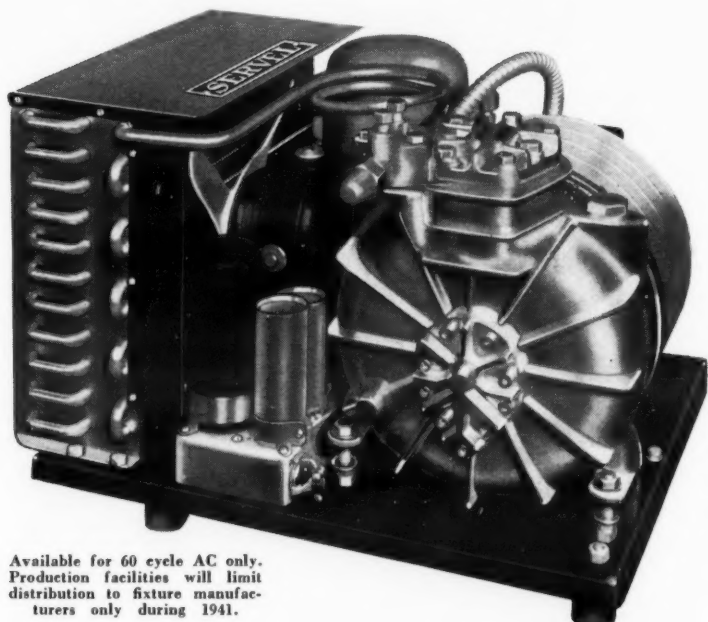


E. ROY WEISHEIT

Recently appointed assistant general manager of Auburn Central Mfg. Corp.

There Is No Substitute For Experience

ONLY SERVEL SUPERMETIC GIVES YOU A COMPLETE UNIT



Available for 60 cycle AC only. Production facilities will limit distribution to fixture manufacturers only during 1941.

As you would expect, Servel's SUPERMETIC is no ordinary hermetic!

It IS truly hermetic! It IS genuinely serviceable! It IS backed by an ironclad warranty! PLUS a score of SUPERFEATURES that no other refrigerating machine in the industry can match!

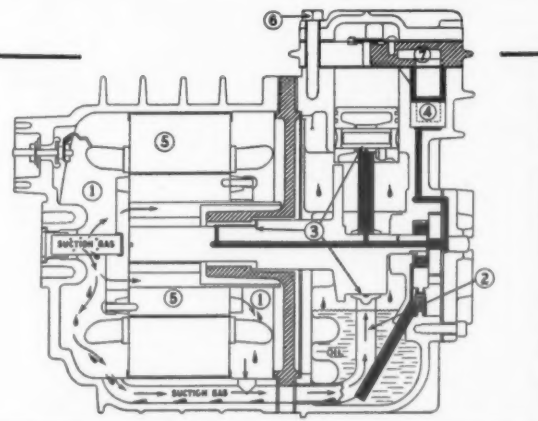
Designed by engineers with a wealth of background in hermetic refrigeration, SUPERMETIC eliminates the shortcomings of earlier hermetic designs, and incorporates those proven, dependable features developed by Servel engineers on hermetic and conventional units over the past 20 years.

No refrigeration machine can be fully modern without these SUPERFEATURES! No hermetic unit can stand the gaff of commercial service without them.

SUPERMETIC is built—not down to a price level—but up to performance standards!

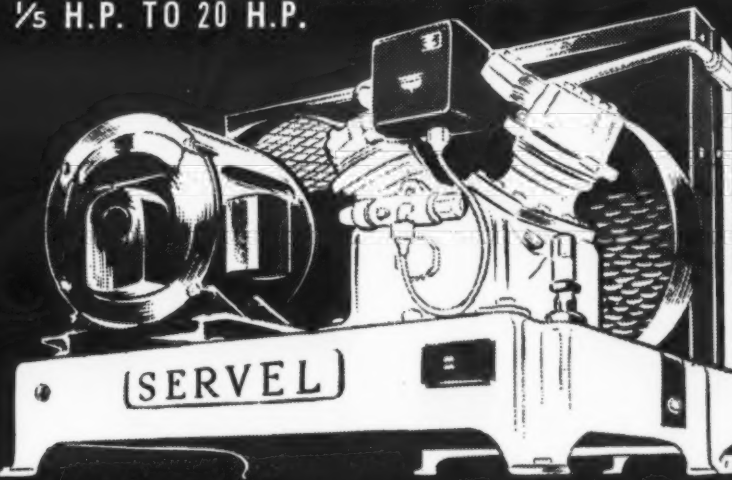
Check These SUPER-FEATURES!

- 1—Oil-Free Motor Case—positively isolated from crankcase oil.
 - 2—Slug-Proof Crank Case—suction port oil separator prevents oil foaming.
 - 3—Forced Lubrication—not splash, not gravity feed, but pressure pump to every bearing and pin.
 - 4—Positive Unloader—oil pressure actuated; insures starting under all conditions.
 - 5—Refrigerant-Cooled Motor—improves efficiency; protects from frost-back.
 - 6—Serviceable—all working parts renewable in field if necessary.
 - 7—Cored Valve Plates—no dividing gaskets to "blow through."
 - 8—Plug-In Motor Auxiliaries—condensers and starting switch on radio-tube type base.
 - 9—Compactness— $\frac{1}{2}$ HP unit measures only 18" x 13 $\frac{1}{2}$ " x 11 $\frac{1}{2}$ ".
 - 10—Moisture-Proof—all wire is metal-covered; condenser is metal-shrouded.
- PLUS—Fine materials, copper-lead bearings, super-finished running parts, extreme quiet and freedom from vibration.



For details, write to Servel, Inc., Electric Refrigeration and Air Conditioning Division, Evansville, Indiana.

OVER 80 STANDARD MODELS —
AIR-COOLED AND WATER-COOLED
 $\frac{1}{2}$ H.P. TO 20 H.P.



SERVEL

COMMERCIAL REFRIGERATION
and
AIR CONDITIONING

\$139 Average Price of Knoxville Sales During 1940

KNOXVILLE, Tenn.—Sales of 4,824 electric refrigerators were made by Knoxville appliance dealers during 1940, at an average price of \$139, according to reports compiled by the Knoxville Electric Power & Water Board. Total volume of household refrigerator sales for the year was \$671,382; volume of all household appliances totaled \$2,126,196.

December sales included 956 refrigerators, 768 of which were installed in FHA projects and whose average price was \$100. Average of all December refrigerator sales was \$109. Range sales totaled 164 at an average price of \$144. Ten commercial refrigerator sales also were reported by dealers, at an average price of \$423.

Following are the 1940 totals and average sales prices of leading major appliances:

Units	Average Price
Residential	
Refrigerators	4,824 \$ 139
Ranges	2,302 144
Water Heaters	848 83
Ironers	102 82
Washers	3,018 78
Cleaners	1,572 67
Radio's	8,530 36
Dishwashers	16 174
Disposal Units	4 156
Commercial	
Refrigerators	144 670
Ranges	9 236
Air Conditioning	23 2,403
Water Heaters	21 91
Milk Coolers	5 235

Year's Sales Increase 45% In Virginia

ALEXANDRIA, Va.—Paced by a 45% increase in refrigerator sales, appliance sales by dealers in the territory of Virginia Public Service Co. moved generally upward last year compared with 1939 totals. Refrigerator sales for 1940 totaled 12,763 units, against 8,797 for 1939.

Range and water heater sales totals also showed sizeable increases. In addition, dealers in this territory accounted for 5,259 washer and 170 ironer sales last year.

Sales for December, 1940 included 472 household refrigerators, 16 commercial refrigerators, 159 ranges, 50 water heaters, 509 washers, and 22 ironers—an increase in every case over corresponding totals for 1939.

Comparison of 1940 and 1939 unit sales of major appliances by these dealers follows:

Appliance	1940	1939
Refrigerators	12,763	8,797
Ranges	1,826	1,190
Water Heaters	599	436

1940 Vacuum Cleaner Sales Total 1,743,443 Units

CLEVELAND—December vacuum cleaner sales of 161,311 units brought the 1940 total to 1,743,443 units, an increase of 21% over the 1,436,198 sales reported for 1939, according to figures compiled by the Vacuum Cleaner Manufacturers Association. Sales for December, 1939 were 155,201 units.

Selling 'Through the Dealer' Rather Than 'To the Dealer'

The Function of the Wholesale Salesman

H. M. Butzloff, author of this series of articles, is central sales manager for Norge. Before that he had many years of experience in the field distribution end of the household electric refrigeration business, with Westinghouse, and with the old Stover Co., original Frigidaire distributor in the Chicago area.



With the introduction of new lines of household refrigerators and other major appliances, the wholesale or distributor's salesman begins a new selling season. This series of articles, by a man well-known in appliance sales work, is aimed to give the wholesale salesman some pointers on how to do a better job.

By H. M. Butzloff

Part-Time Salesmen

The sales force of the dealer may oftentimes be augmented through the use of part-time salesmen found through route and delivery men, retail sales clerks, and others.

maries of financial statements of dealers submitted to a finance company will be found helpful:

Analysis of Operation of 132 Furniture Stores (80% or more Instalment) Typical (Medium Average) Figures

	%
Net Sales \$74,000.....	100.0
Cost of Goods Sold.....	56.3
Gross Profit	43.8
Overhead Expense	%
Salaries of Owners and Officers	7.2
Salaries of Employees.....	10.4
Rent	3.7
Advertising	1.9
Light, Heat .....	.9
Taxes .....	.8
All Other Expenses.....	11.5
Net Profit	36.4
Inventory Turnover	3.2 times a year

Analysis of Operations of 415 Electric & Gas Appliance Stores Typical (Medium Average) Figures

	%
Net Sales \$25,000.....	100.0
Cost of Goods Sold.....	64.3
Gross Profit	35.7
Overhead Expense	%
Salaries of Owners and Officers	8.9
Salaries of Employees.....	9.8
Rent	2.0
Advertising	1.4
Light and Heat .....	.7
Taxes .....	.4
Bad Debts .....	.6
All Other Expenses.....	7.2
Net Profit	31.0
Inventory Turnover	5 times a year

You really sell yourself when you know the dealer's business through your knowledge of his stocks and inventories—his manpower—and his basic costs of doing business.

(The End)

Nash-Kelvinator Awarded Army Trailer Contract

DETROIT—A three million dollar order for trailers for the United States Army has been received by Nash-Kelvinator Corp., reports George W. Mason, president.

The trailers will be manufactured at the Racine, Wis. plant of Nash-Kelvinator division of Nash-Kelvinator Corp., and preparations for this production will start immediately. The army trailers will begin to come off production lines about March 1.

Minnesota RDL Meets

MINNEAPOLIS—Forty-five dealers, salesmen, and factory and distributor representatives attended the annual jubilee stag of the General Electric Retail Development League of Hennepin county, held recently at the King Cole hotel. H. J. Wedding is president of the group.

Knowing the Costs of Doing Business

In order to properly guide the thinking of a dealer on a sound basis, it is imperative that a contact man have a knowledge of the costs of doing business. What should one pay for rent? What are sales costs? What portion of the dealer's gross sales should go into advertising, administrative expense, and service cost?

All of these questions are of vital importance, but no definite rule or percentages can be laid down as absolute because each business is individual in its needs and requirements.

To use as a basis of understanding and discussion the following sum-

Hundreds of Thousands of **WAGNER MOTORS** with **Cast Aluminum Rotors** have been built during the past 20 Years and are still giving perfect satisfaction!

Cast aluminum squirrel-cage rotor of a Wagner motor—typical construction for sizes 40 to 200-hp. Each end of rotor has eccentric balancing discs and cast aluminum blowers.

The mechanical and electrical characteristics inherent in cast aluminum rotors have contributed in no small measure to the reputation for quality and dependability that Wagner has established during the past 50 years.

Some of the advantages of cast aluminum construction are:

- 1 The squirrel-cage is cast under heavy pressure, completely filling the closed rotor slots and the moulds which form the end-rings.
- 2 The rotor bars and end-rings make complete and intimate contact with the core iron, facilitating heat transfer and absolutely eliminating squirrel-cage vibration.
- 3 The squirrel-cage material in general-purpose motors is practically pure aluminum of high conductivity and ductility. The most severe service does not make it brittle.
- 4 A special patented construction is used in the larger sizes, resulting in reduced load losses and increased motor efficiency.

Wagner Uses Cast Aluminum Squirrel-Cage Rotors From 8-Inch Fans to 200-hp Motors

Wagner Electric Corporation
6400 Plymouth Avenue, Saint Louis, Mo., U.S.A.
MOTORS • TRANSFORMERS • FANS • BRAKES

Something EXTRA ... For Rainy Days

PROFIT PROTECTION RESERVE PLAN

IT HELPS YOU MAKE SALES

IT HELPS YOU MAKE PROFIT

IT PROVIDES PROFIT PROTECTION

YOUR FIRST STEP IS TO MAIL THIS COUPON

*Paste this on back of penny post-card or enclose in envelope *

COMMERCIAL CREDIT CORPORATION BALTIMORE, MD.

Send me full information.

Name _____

Address _____

City & State _____

HERE'S a proposition for all you appliance dealers. It can mean a lot of extra dollars for you this year.

You know that there are special expenses incidental to time-payment selling that could very easily eat away a fair share of your merchandise profits.

You can put a "stop" on this loss by using the PROFIT PROTECTION RESERVE PLAN for financing your retail sales. Twice a year, you'll find that your accumulated dividends will offset such expenses and put the profit back in your pocket.

When the "rainy days" come, you'll be thankful for this protection—this margin of saved profits.

Thousands of dealers use this sound plan, with benefit to their customers and to themselves. Why not mail the coupon and learn how it can help you!

Commercial Credit Corporation

Distributor-Dealer Doings

When G-E Outlined Plans To Power Company Men



LOT STRUCT. ETC.	ASSU MED FIRST COST	ASSMD MTHLY
	CONV. HIGH	CONV. HIGH
FURNACE & WATER HTR	4000	4000
WIRING	350	495
CABINETS	100	115
CASINO DISHW. GARB.	60	90
COOKING	75	130
REFRIGERATION	115	135
FAN & CLOCK		40
TOTAL	4760	5385
DOWN PAYMENT	560	580
REMAINDER	4200	4800
MONTHLY AMORT.	'24'	'27'

C. W. Stuart sets out to prove that a home fully equipped with electrical appliances costs little more, in the long run, than a home that doesn't have them. And he's got the figures to prove it.



E. F. Jeffe, vice president, Consolidated Edison Co. of New York, and C. E. Wilson, president of General Electric Co., get attention from a flower girl just before the banquet at the Bridgeport meeting.



"An apple a day" finds advocates in E. E. Potter, G-E; R. F. Lincoln, Boston Edison Co.; and W. G. Keay, Cambridge Gas & Electric Co. Apples are mighty good "refreshers" during convention intermissions.

Minneapolis Dealers Name New Officers

MINNEAPOLIS—The Minneapolis Electric Appliance Dealers Association, at its annual meeting here late in January, elected George Johnston president.

Other officers are: Robert H. Gustafson, vice president; W. G. Stuefer, secretary-treasurer; W. A. Ritt, secretary-manager; and C. B. Annis, W. H. Bunker, E. G. Beecher, and Earl Williams, directors.

A. H. Kessler, promotion manager of the North Central Associated Electrical Industries, spoke on advertising campaigns conducted here on electric cooking and water heating appliances. T. L. Losby, Northern States Power Co., discussed sales possibilities for 1941 as represented by new lines of appliances.

Spiraw Bros. Open Up In Elmira Heights, N. Y.

ELMIRA HEIGHTS, N. Y.—Sam and Joe Spiraw have opened Spiraw's Furniture & Appliance Sales store, the first of its kind to operate here for several years. The store will handle furniture, appliances, and sporting goods.

Gouger & Veno Go Bigger

PINEHURST, N. C.—Gouger & Veno, Westinghouse appliance dealership here, has moved into the spacious quarters formerly occupied by the Pinehurst Department Store.

From Philadelphia To Palestine & Back Again—Saga of S. Schimmel

PHILADELPHIA—Samuel Schimmel, the man who sold 1,000 air conditioning units in Persia some three years ago, and who made the name of Kelvinator widely known throughout the Near East, has returned to his native land. The war has forced him home.

He has set up sales offices at 2301 North Park Ave., Philadelphia, and plans to represent manufacturers in the Philadelphia area. Correspondence of interested parties is invited.

A former Kelvinator distributor in Philadelphia, Mr. Schimmel became interested in the Zionist movement, obtained the Kelvinator franchise for Palestine and the Near East, and moved to the Holy Land with his family. Until the outbreak of hostilities in the Mediterranean, he had a thriving business in Palestine, Persia, and Egypt.

He entertained the editor of the NEWS during the latter's visits to Tel-Aviv and Jerusalem in 1936, and gave ample evidence of his knowledge of refrigeration and electrical appliance merchandising.

—G.F.T.

Installation Aid Dropped, Ft. Wayne Sales Down

FORT WAYNE, Ind.—Sales of electric ranges and water heaters in Fort Wayne during 1940 showed nearly a 30% decline from 1939, according to reports by the Indiana Service Corp. and the City Light & Water Utilities, the two utilities serving the territory.

The record for 1940 shows 1,697 electric range installations as against a 2,208 total for 1939; 884 electric water heater installations in 1940 as compared with 1,107 in 1939.

The decline is attributed to the withdrawal of free installation subsidy at the beginning of the year after a four-year period of promotion during which the two utilities provided free installation.

Anchor Distributing's Dec. Sales Best Ever

PITTSBURGH—Sales of Anchor Distributing Co., Crosley distributor, during December, 1940 exceeded by a large margin the sales total for any previous month in the company's history, reports Harold W. Goldstein, head of the company.

New Store In Oak Cliff, Tex.

DALLAS, Tex.—New Electric Appliance Store is the name of an appliance shop opened in Oak Cliff by W. G. Morrow, formerly of the staff of Montgomery Ward Co. G. E. Fowler, a veteran appliance salesman, will be sales manager.

Gale gives
'Extras'
AT NO EXTRA COST

FOR EXAMPLE...

Just compare this big, oversize Gale "Supreme 6" (GS658) with any other popularly-priced refrigerator on the market! It's priced to meet the toughest competition, give you a generous margin, and offers the buyer a host of features—twin freezers, frozen food storage, meat drawer, dairy basket, twin vegetable crispers, thermometer, vegetable bin, hermetic 'Mechanical Iceberg' unit with improved equalizer and revolutionary FLUID COOLED condenser—continuous dissipation of heat without the use of a fan. Silent—no moving parts.



Typical of Gale extra value is this "Supreme 6" (GS658).



HERE'S WHAT GALE 'EXTRAS' MEAN TO YOU...

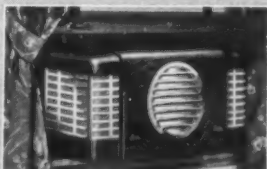
The extra beauty, economy, and luxury of the new Gale models give the buyer more for his money. That means more sales... easier sales for you!

Step-up selling is logical and easy. Each step-up gives the buyer extras he can see and want! And, each step-up gives you a bigger margin of profit.

Every Gale is a profitable model. There are no "loss leaders". No quotas. No high pressure. Direct from factory sales policy lets you make more.

Gale builds supremely good refrigerators and pays you well to sell them. This year the job will be easier and more profitable than ever before. Get started right now!

GALE PRODUCTS
Refrigeration Division:
Outboard, Marine & Mfg. Co.
GALESBURG, ILLINOIS



GALE Portable Air Conditioning Units—another profit-building appliance!

Gale
ELECTRIC REFRIGERATORS

GALE PRODUCTS
1835 Monmouth Blvd.
Galesburg, Illinois

Gentlemen:

I want to know what the Gale line can offer me. Please rush full facts without obligation.

NAME _____

ADDRESS _____

CITY _____

STATE _____

Refrigeration COPPER TUBING--



HERE'S where we "dehydrate" 'em, folks—that is—remove all moisture. We also remove the back bone of the tubing—make it easy to bend. This Annealing Furnace is the last word in automatic operation—it gives the tubing just the right temper for easy flaring and bending.

PENN BRASS & COPPER CO., INC.
POWELL AVE., ERIE, PENNA.

'Wages-Plus' Plan For Service Men Helps St. Louis Firm Quadruple Its Business

By James McCallum

ST. LOUIS—How J. A. Daniels, head of City Refrigeration Service here, has managed to quadruple his business in four years and build his organization from three to 14 men in that same length of time, is a story in which his company's \$4,000 or \$5,000 appliance parts stock, four-part pay plan for service men, and variety of service all play an important role.

Mr. Daniels organized City Refrigeration Service in June of 1936, after gaining several years of experience with Champion Shoe Machinery Co., Frigidaire, and another firm of his own known as West Side Service.

City Refrigeration Service sells no new equipment, preferring to refer all sales of this type to dealers or manufacturers for which the firm does service work. The company does, however, recondition and sell some used equipment.

For advertising, the firm relies upon the dealers for whom it does service work, and upon advertisements in the classified section of the telephone directory. Mr. Daniels sees to it that the company's name is in the phone book in as many places as possible. It is listed under the name of every product for which the company is authorized service representative, as well as under its own name, and in its own advertisements. The company's name appears

eight times in this year's directory. Sales of appliance parts constitute a considerable portion of the company's total business. The firm continually carries about \$4,000 or \$5,000 worth of parts in stock, and encourages the service men to push this type of sales by paying them a commission on certain parts.

Secret of making money in this end of the service business, Mr. Daniels confides, is buying parts in quantities at low prices whenever the opportunity presents itself, and then selling them at a retail price high enough to afford considerable margin.

PARTS PICKED FOR PUSHING

Whenever the company obtains a big lot of some particular part in this way, Mr. Daniels urges his men to push this item until the supply is nearly exhausted. Then the men's efforts are diverted to some other item on which the company has just stocked up. Opinions of the service men themselves greatly influence the company's buying of parts, for Mr. Daniels reasons that the men won't do such a good job of selling items in which they have little confidence.

More than anything else, Mr. Daniels stresses the importance of his buying technique. "The buying is the thing," he says. "We drive all our hard bargains with our suppliers,

rather than with our customers."

Mr. Daniels runs a strictly union shop, but because of his rather unique method of compensation most of his men's earnings run well above the union scale. The service men are paid the regular union wage of \$1 an hour for their time, plus 25 cents an hour for their car (each man uses his own).

In addition to this, each man is paid a 5% commission on all money he collects, and as most calls are made on a strictly cash basis this usually provides a welcome supplement to the man's income. Then on top of all this, the company pays each man another 5% on the retail value of certain parts.

As a result of this four-fold compensation plan, Mr. Daniels reports that some of his men average as much as \$2,500 a year. In addition, prizes are sometimes offered for the men selling the most parts in a given period of time.

Careful routing of calls is another factor which Mr. Daniels considers important. Each night the men are assigned a number of calls for the next day. Calls for those men living quite a distance from the firm's headquarters are laid out in such a way that the men will gradually work in toward the shop. Men living near the shop have their calls routed in the opposite direction.

Open Display In Wide Open Spaces



In Phoenix, Ariz. the J. Carl White Co., wholesaler of refrigeration parts and supplies, has utilized its generous quarters to provide plenty of display for the products it sells. Notice how big units like compressors and unit coolers are set out on the floor, the

use of display cases and tables, and the way in which all the shelving fronts on the showroom floor. Officials of the company report a general increase in refrigeration business in the territory, particularly in small air conditioning jobs.

A truck is used for parts delivery, so that a man working on a job for which he does not have the proper parts can have these parts delivered to him without leaving the job. This system has been found very helpful, Mr. Daniels reports, despite the fact that each man carries better than \$100 worth of parts in his car at all times.

The company offers 24-hour service, but uses its own night phone rather than relying on the answering service used by other companies. This tends to keep the company's phone number firmly fixed in the customer's mind, Mr. Daniels believes. The firm name and phone number are spread in every way possible, and the servicemen always apply advertising stickers to each job serviced.

FOLLOW-UP ON COMPLAINTS

Any customer complaint is followed up by sending a questionnaire to the customer asking for complete information about the service man who handled the job. Typical questions are: Was he courteous? Did he seem to work quickly and efficiently? Did he leave your place neat and orderly or littered up and untidy?

As for refrigeration work, the company makes a policy of staying away from heavy industrial installations and sticking to the smaller packaged units. No hermetic units are handled except those for which the company is the authorized service agency. Household and commercial work, Mr. Daniels figures, balance out about even in dollar volume, although more household calls are made.

Most of this service work is handled on a cash-on-the-line basis,

but some commercial overhaul work which runs into a reasonably high figure is financed.

Costs were saved on one apartment house service contract, involving about 600 refrigerators, by storing a supply of parts on the premises during the guarantee period so that the service man could make a maintenance check on these units and make any replacements necessary without returning to the shop.

Despite the fact that Mr. Daniels' firm maintains a completely equipped service shop, no motor repairs are attempted. All this type of work is farmed out to a company which specializes in motor maintenance. Every one of Mr. Daniels' service men carries two or three motors in his car at all times, so that if a defective unit is found it can be pulled out and replaced until the original motor is repaired.

SERVICING OTHER PRODUCTS

In addition to refrigeration and air conditioning work, City Refrigeration Service also handles the servicing of ranges and washing machines. In fact, within the last year the company has been appointed authorized service agency for two nationally advertised range lines, and only recently Mr. Daniels laid in a \$300 stock of range parts. The company also services some ironers, but this is done only as an accommodation for customers.

The company has built up such a reputation for its work, Mr. Daniels reports, that often companies which have started the sale of a new line of appliances will turn their service work over to City Refrigeration Service until sales bulk large enough to merit taking on a service man of their own.



Above: Aluminum Research Laboratories, New Kensington, Pa.

there's been a lot
GOING ON

For years, behind the scenes at Aluminum Research Laboratories, they've been studying the behavior of various Aluminum Alloys when used in refrigerating equipment. These efforts, plus examination of experimental and actual service applications, have closely paralleled those of the manufacturers in their drive for better equipment at lower cost.

As a result, the use of Alcoa Aluminum Alloys in refrigerating and air conditioning work has now reached very substantial proportions. Substitution of Aluminum for other metals has resulted in savings in cost and weight, and often in improved performance and appearance.

Research and engineering development work are proceeding intensively along these lines. A review of what has been accomplished and an evaluation of the mutual effect of various refrigerants and Aluminum Alloys are contained in the paper, "Aluminum in Refrigerating Equipment." You may have a copy by writing ALUMINUM COMPANY OF AMERICA, 1975 Gulf Building, Pittsburgh, Pennsylvania.

DEFENSE COMES FIRST

To meet the needs of the National Defense Program, plus the normal demands of peace, a vast expansion of our already greatly increased production capacity is being speeded. When the emergency is past, there will be more Aluminum available than ever before.

Meanwhile, if you can't get all the Aluminum you want when you want it, remember Aluminum is helping you by helping to meet the National emergency.

ALCOA



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DRYNESS

You get it in WOLVERINE TUBING

—Buy From Your Jobber—

WOLVERINE TUBE CO. DETROIT

NOW-EXTRA PROFITS

ASSURED REPEAT BUSINESS

with **A-E Froz-n-Food Lockers**

Get in on this big profit opportunity now! Dealers the country over are expanding their incomes—increasing their business with A-S-E Froz-n-Food UNIT Lockers. Tops for every refrigerated locker requirement. A-S-E UNIT Lockers are easy to assemble and install. There is no unprofitable servicing. They have the design and construction that click with customers. And you can sell them for present food-locker plant needs—make additional profits on repeat business. Write today! We'll be glad to give you all the facts on this big sales and profit opportunity. There is no obligation.

SOLD ONLY THROUGH DEALERS

ALL-STEEL-EQUIP COMPANY

Incorporated
102 KENSINGTON AVE. AURORA, ILLINOIS

Chain Store Cooling System Incorporates Wide Variety of Design Methods

SEATTLE—One of the largest and most modern air conditioning system installation jobs here was completed in September in the new \$1,000,000 store of the F. W. Woolworth Co. by the York Ice Machinery Corp. Compactness of design is a feature of the installation which was planned to minimize space requirements and to conform with the decorative features of the store.

Approximately 35,000 square feet of floor area in two main zones, first floor and basement sales areas, are served by the system, with each zone automatically controlled to meet their individual requirements. Interior treatment of the store precluded the use of windows for natural lighting or ventilation. This fact, which meant the use of indirect lighting with increased electrical energy, contributed to increased heat build-up within a confined space.

Restaurant sections on both floors, with their heat generating equipment and resultant food odors, and the very high average occupancy of this type of store, all called for special consideration.

YEAR AROUND SYSTEM

The air conditioning system provides complete functions for cooling and dehumidification, heating and humidification, cleaning and circulation of air. To obtain mechanical cooling a York-Freon-12 water cooling system, which has a capacity of 190 tons, is used. This equipment, installed in the basement, includes two "Freon-12" compressor units, each directly connected to 100 hp. synchronous motors. The compressors have 50% capacity reducers which give four equal steps in plant capacity, enabling economical operation at varying loads.

Heat removal is accomplished by an economizer, a combination forced draft cooling tower, and refrigeration condenser, located adjacent to compressor. Air make up to the economizer is obtained from louvered openings in the upper floor, with the discharge air reaching the roof

through masonry shafts incorporated in the building design.

A 10-hp. centrifugal chilled water pump circulates 500 gallons per minute through a flash type shell and tube cooler to individual air washers for each zone. These are situated on the second floor, directly above the basement machinery room.

The two air conditioning assemblies are separate, complete units and include replaceable type filters for air cleaning, spray washers, steam heating coils, and supply fans. The main chilled water pump in the basement supplies the individual 10-hp. spray pumps at washer locations.

Dewpoint thermostats and three-way mixing valves automatically control the amount of chilled water required. A total of 68,500 cu. ft. of air per minute is delivered to the conditioned areas of the store by sirocco fans powered with 15-hp. motors. About 40% is outside air drawn from louvered screened openings at the second and third floor levels, and the balance is recirculated air from the sales areas of the store.

PNEUMATIC CONTROL

The temperature control is the pneumatic type and uses Auditorium Corp. patents. Room temperature and humidity, set for 75° dry bulb and 50% relative humidity respectively during the cooling cycle, are regulated by an air bypass around the individual spray chambers operating on air moisture control.

The air distribution outlets and ducts were designed and installed to conform to the architectural design and decorative features of the store and form an integral part of the ceiling, and supporting marble columns in the store, and also blend with the indirect lighting fixtures. On the first floor, circular outlets were placed around the columns at ceiling line, and the branch supply ducts for each are carried along the second floor ceiling.

In the basement sales area, four branch supply ducts were run in furred ceiling space and connect to Anemostats located in conformity to recessed light fixtures. These supply ducts are connected to masonry enclosed shafts at back wall line from the second floor.

MASONRY DUCTS

Return air in both sales areas is removed at floor line to a common mixing plenum at equipment location. Whenever possible, vertical masonry shafts for air ducts, incorporated in the building design, were used.

Store entrance doorways were furnished with special spot heating systems to prevent drafts during the winter, with warm air discharged vertically downward above doors. Blast heating coils in fan room heat the conditioned areas.

Exhaust air ventilation systems, with fans operating in penthouse on the roof, were installed at special points, such as in kitchen and rest rooms. A similar system, connected to a special ventilated cornice over the backbars at the lunch counters, remove food odors and heat.

Installation was designed and installed by York under supervision of the engineering department of the Woolworth company. H. T. Orebaugh, engineer in the Seattle office of York, supervised the installation.

E. D. Johnson Heads Boston Bureau

BOSTON—E. Daniel Johnson of Buffalo Forge Co. was elected president of the Air Conditioning Bureau of Boston at the annual business meeting here Jan. 30.

Forrest V. Paige of Boston Edison Co. was named vice president; Earl G. Carrier, secretary; and Daniel Ricker, Boston Edison Co., treasurer. Named directors for three-year terms were E. V. Wetmore of Wetmore-Savage Electric Supply Co., and Frederic L. Oliver of Frigidaire.

Holcombe J. Brown, president of the Engineering Societies of New England, was guest speaker, discussing the bill now before the Massachusetts legislature for permissive registration of engineers, and warning against any attempts to make registration compulsory.

Mills Model



Sixteen Rodgers, Chicago show girl, examines the operating mechanism of this 5-hp. Mills store cooling unit with front panels removed. The cabinet is insulated against condensation and noise.

Cafeteria Cooled In Southern City

RALEIGH, N. C.—This city's first air conditioned cafeteria, Warren's Cafeteria, was opened recently at 130 S. Salisbury St. K. E. Stahl Mfg. Co., 114 W. Lenoir St., installed the air conditioning system.

Air Conditioning Aids Defense Program In Aircraft and Motor Plants

HARRISON, N. J.—Among orders for spring delivery recently announced by Carbondale division, Worthington Pump & Machinery Corp., are four centrifugal refrigeration water cooling systems for the air conditioning of the new Dallas, Tex. plant of North American Aviation.

The combined capacity of these four systems will provide cooling equivalent to the melting of over five million pounds of ice in each 24 hours. This will provide uniformly comfortable working conditions for the men engaged in this precision work regardless of outside weather conditions. It also assures accurate fitting and functioning of all precision parts in assembly through elimination of expansion and contraction of metal due to temperature change, and by freedom from dust and tarnishing of polished surfaces.

Another of the country's large aviation engine manufacturing plants was originally equipped with an air conditioning system when built in 1939. The results obtained were so excellent for both men and product that when the new windowless plant extension is erected this spring, three centrifugal refrigeration systems for air conditioning will be installed. The three systems will have a total capacity of 1,950 tons of refrigeration.

Packard Motor Corp. has ordered two of these centrifugal water cooling systems with a combined capacity

of 1,000 tons refrigeration for the air conditioning of their new plant where the Rolls Royce "Merlin" engines will be made for British and American fighter and bomber planes.

CONTRACTS AWARDED

DALLAS, Tex.—With foundations for four of the five buildings auxiliary to the North American Aviation, Inc. plant here already completed, progress is well under way in the preliminaries to installation of air conditioning. Sheet metal work for the conditioning plant is under contract to Pines-Natkin Co., which has set up a metal working establishment at the site.

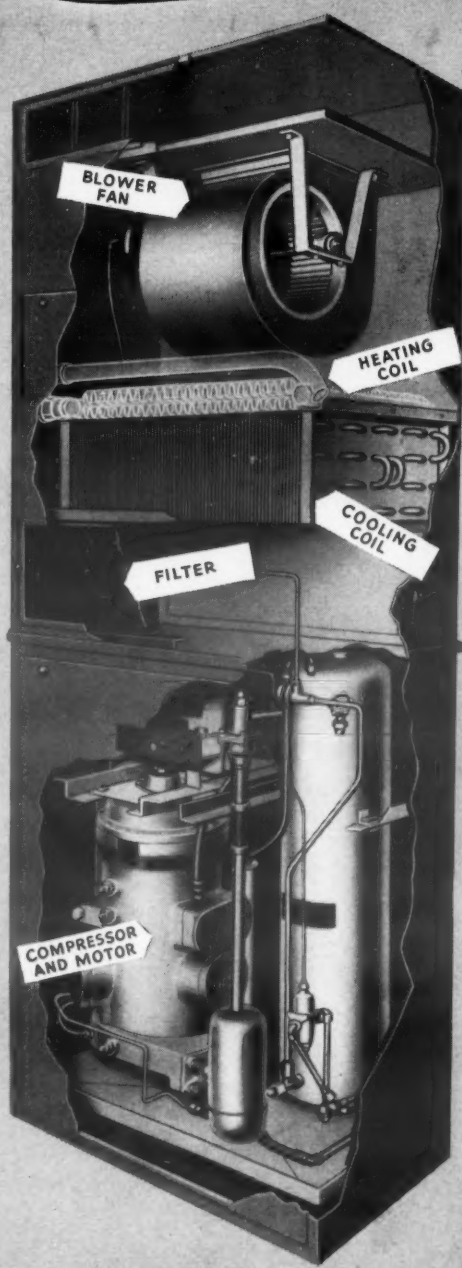
Conditioning of the vast aircraft factory and its array of supplementary buildings, requires a supply of air to accommodate an area of 1,000,000 sq. ft.

Frey Bros., Inc. have the contract for installation of conditioning equipment.

Torrington Buys Patents For Blower Wheels

TORRINGTON, Conn.—Purchase of patents covering design and methods of producing pressed steel (cup type) blower wheels has been announced by the Torrington Mfg. Co. The patents were acquired from American Blower Corp. of Detroit.

AIRTEMP COOLING UNITS FIRST IN THE FIELD—LEADERS IN DESIGN



Sealed Machines at Lowest Prices Mean Dealer Profits

Big Market—Every year since 1937 when Chrysler Airtemp introduced the 3 and 5 h.p. sealed units, the market for packaged cooling in shops, offices and restaurants has doubled. Thousands of Chrysler Airtemp units are giving satisfactory service today.

Sealed Mechanism Saves Service Expense—Chrysler Airtemp was first in the field with a sealed, self-contained cooling unit—the only satisfactory and modern type of construction. Today Airtemp offers the same sealed machines, basically unchanged. Both the 3 h.p. and the 5 h.p. install at competitive prices including a real profit margin for the dealer. Installation is simple. Units are approved by Underwriters' Laboratories and warranted by the Chrysler Corporation.

Note Exclusive Features—which mean dependability, long life and economy of operation. Units can be easily removed in winter or steam coil can be added for winter air conditioning. Send coupon for detailed information regarding dealer proposition.

CHRYSLER AIRTEMP
AIRTEMP DIVISION OF CHRYSLER CORPORATION
DAYTON, OHIO

Both the 3 h.p. and 5 h.p. Chrysler Airtemp cooling units are exceedingly compact, the 3 h.p. unit taking up only 20" x 32" on the floor. Cabinet is handsomely finished in crinkle enamel. Steam coil can be added as indicated. Efficient compressor, Airtemp's exclusive radial design, with automatic unloader, is sealed with its electric motor in a permanent bath of oil.

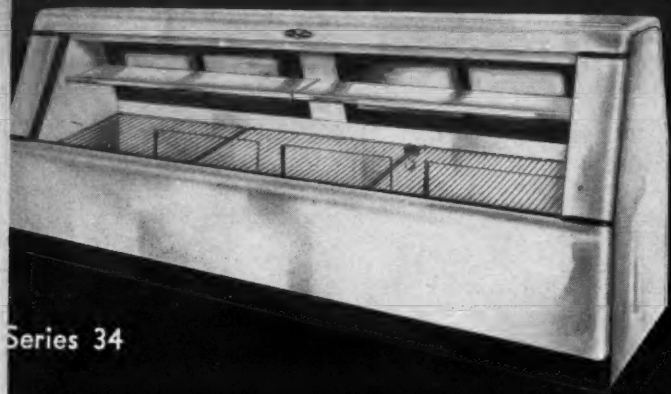
Airtemp Division, Chrysler Corporation, Dayton, Ohio.

Please send me complete dealer information regarding your 3 h.p. and 5 h.p. packaged cooling units.

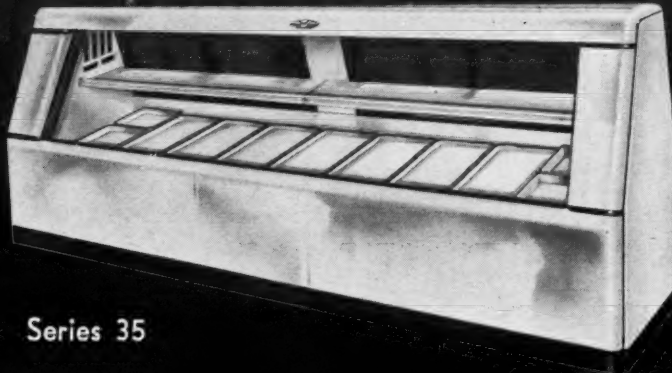
Name _____
Address _____
City _____ State _____

Specify
ANSUL
in your order for refrigerants and you automatically specify satisfaction. ANSUL gases are unfailingly clean, pure, dry. The individual analysis tag on every ANSUL cylinder assures you quality with proof without exception.
ANSUL CHEMICAL COMPANY
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Agents for Kinetics "Freon-12"

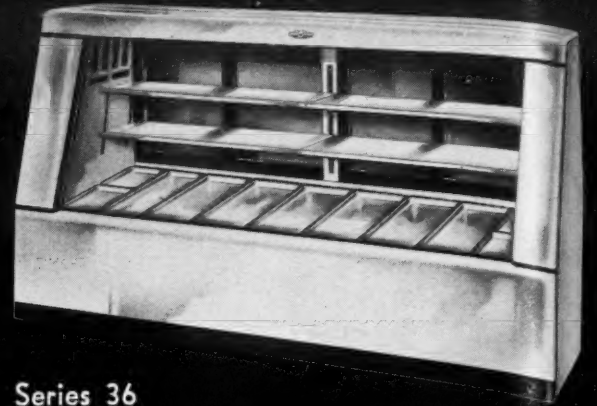
ANSUL
SULPHUR DIOXIDE
METHYL CHLORIDE



Series 34



Series 35



Series 36

All-Steel

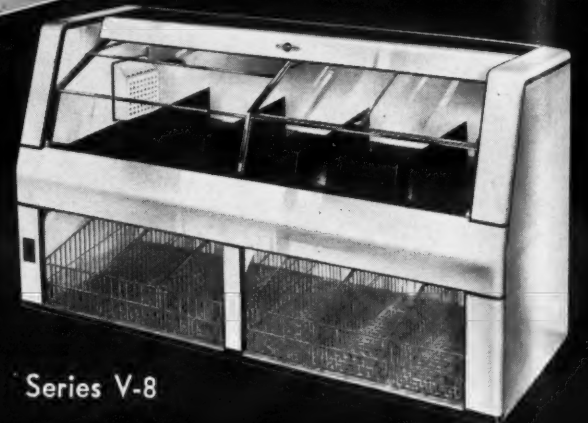
Display Cases



Series 38



Series 39



Series V-8

SEEGER

*the leading name
in commercial refrigeration*

For Detailed Information
Phone . . . Write . . . or Wire

SEEGER REFRIGERATOR COMPANY
SAINT PAUL, MINNESOTA - NEW YORK - BOSTON - CHICAGO - LOS ANGELES



P-27 Capacity 34.4 Cu. Ft.

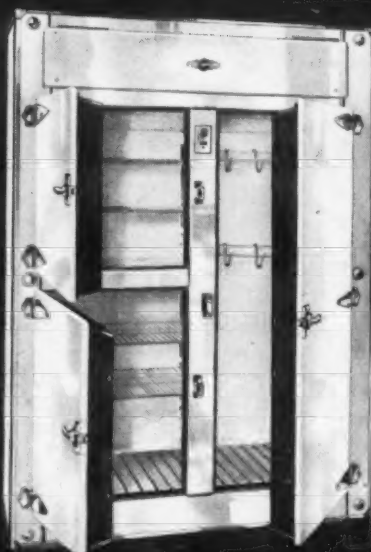
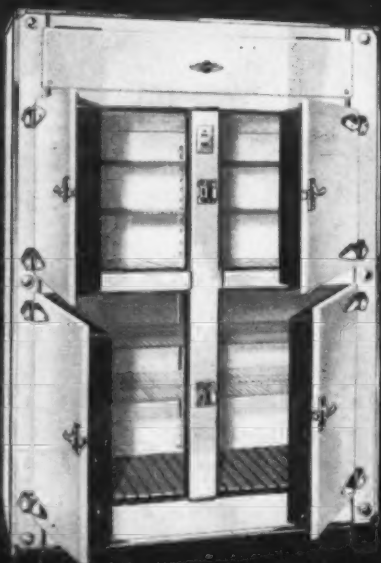
*Commercial
Cabinets*

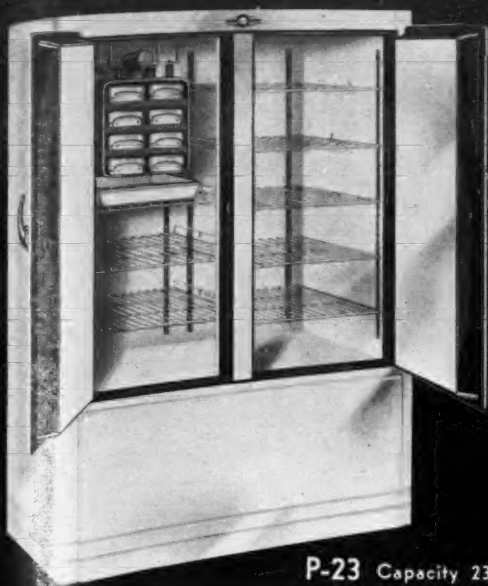


P-21 Capacity 25.0 Cu. Ft.



P-68 Capacity 85.2 Cu. Ft.





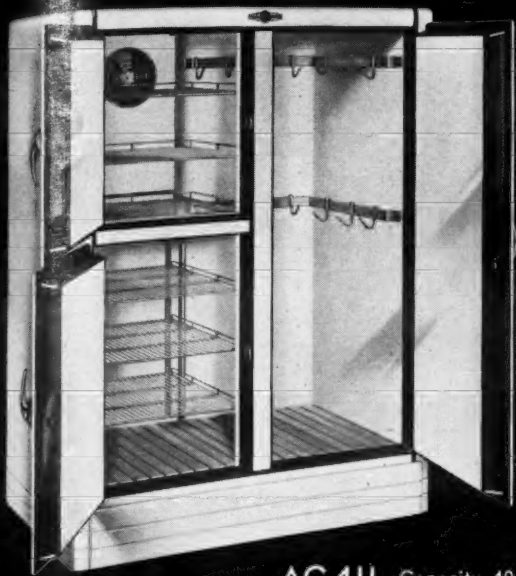
P-23 Capacity 23.80 Cu. Ft.



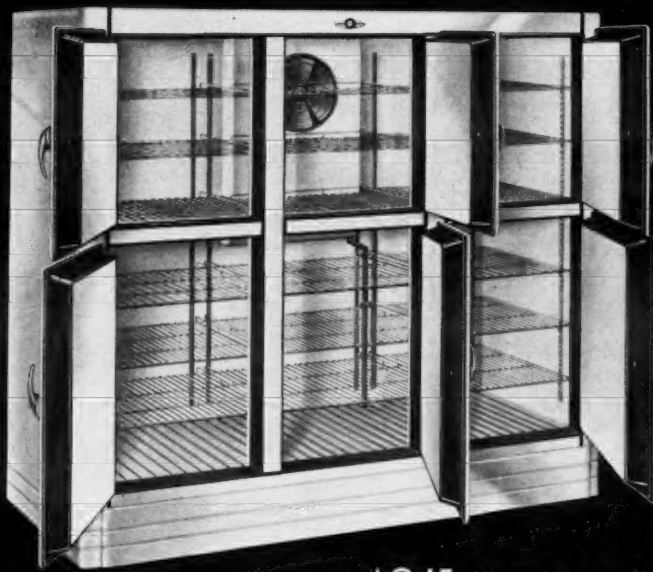
AC-33 Capacity 31.8 Cu. Ft.



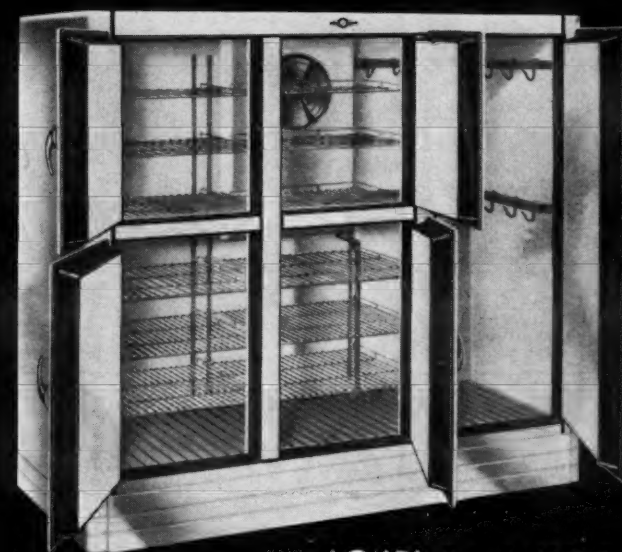
AC-41 Capacity 40.7 Cu. Ft.



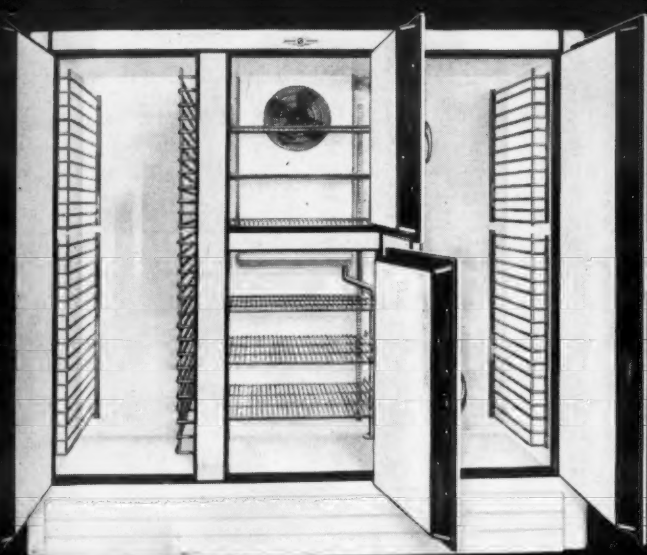
AC-41I Capacity 40.7 Cu. Ft.



AC-65 Capacity 63.25 Cu. Ft.



AC-65I Capacity 63.25 Cu. Ft.



B-6520 Capacity 68.0 Cu. Ft.



D-I-M 20 Capacity 21.98 Cu. Ft.



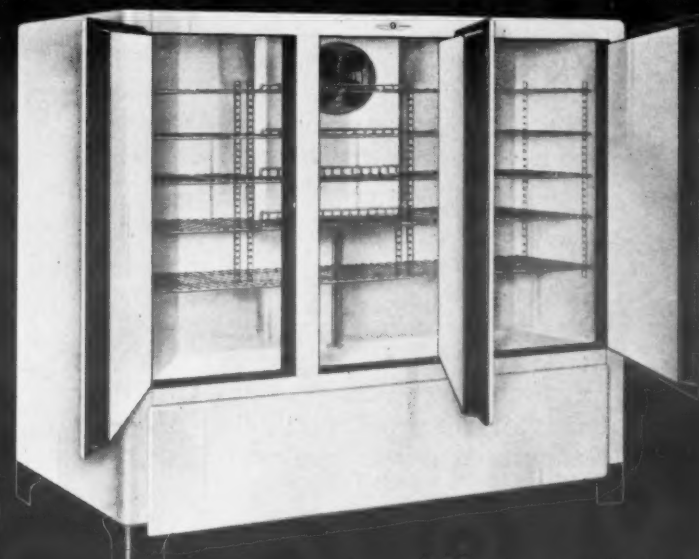
D-I-M 30 Capacity 32.8 Cu. Ft.



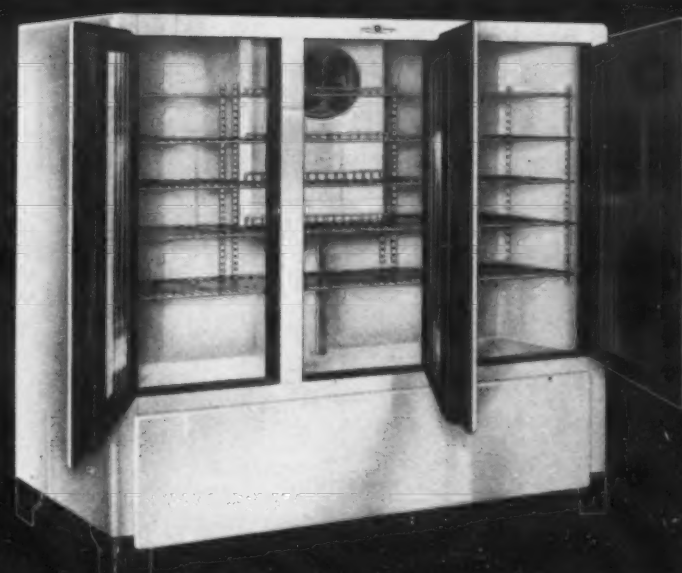
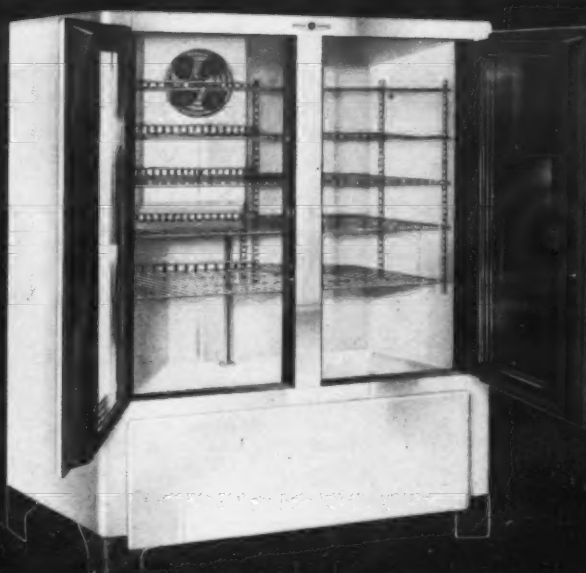
D-20 Capacity 21.98 Cu. Ft.



D-30 Capacity 32.8 Cu. Ft.



D-50 Capacity 50.8 Cu. Ft.



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After Peace, What?

A LONG-TERM plan for "arm-in-arm" cooperation between private business and government through four stages including the period of rearmament for defense and afterwards has been outlined by Charles E. Wilson, president of the General Electric Co.

Mr. Wilson emphasizes the need for "total security," moral, physical, and economic, to protect the democratic process and system of free enterprise against "destructive forces flooding the world with false philosophies."

In suggesting a broad program, embracing both the current national defense effort and the following periods, he warned that "we might very readily delude ourselves if we fall into the error of laying our plans on the premise that when the next peace papers are signed, the national emergency will cease, and we shall return to that nebulous state known as 'normal living.'"

Mr. Wilson has expressed the belief that during 1943, 1944, and 1945 world conditions and the acceleration of the obsolescence of defense materials will require this nation to devote "much more of its energy and its substance to defense production than is generally believed."

He also believes that the peak of defense production and employment will be passed in the next two to four years and that "the prospective reduction in employment, after this point has been passed, may be measured in terms of three to six million people, rather than ten to twenty million, as some quite sincerely believe."

Mr. Wilson describes the first period in his program as the "recovery stage."

"This is the stage," he declares, "in which we are now, and in which I believe we shall remain until the Federal Reserve Board index of industrial production (unadjusted) averages 140 during a two months' period."

There are eight "needs" during this stage:

- 1—A devotion to democracy and an understanding of and patience with its deliberative processes.
- 2—Respect for the laws made by the people through their representatives for the protection of their rights.
- 3—A thorough-going system of free enterprise.

4—Full time employment of all employables.

5—The free flow of all goods, purchasing power, and enterprise capital for production.

6—The encouragement and development of new inventions.

7—Rural electrification and the industrialization of agriculture.

8—Hemispheric self-sufficiency through the development of South America as a source of raw materials—a development which should be subsidized, if necessary."

The second period can be described as the "stabilization stage," immediately after the Federal Reserve Board index has averaged 140 for two months, during which the needs will be:

1—Credit and price control against inflation—against long-term commitments on durable consumer goods purchases and against non-essential personal loans.

2—Maintenance of a full supply of normal needs of a nondurable character to all stratas of society.

3—An acceleration of the modernization of industry.

4—Gradual reduction of governmental activities, expenditures, and loans connected with all non-defense purposes in the conventional field of private enterprise.

5—Taxation to balance the non-defense budget—"a step which, with the one preceding, you will notice I place in the second stage of this program because we want no restraints upon employment and increased purchasing power in the first."

6—Industrial development of the temperature zone of South America.

Mr. Wilson believes there will be a wave of immigration from Europe to South America, whatever the outcome of the war, just as there was a wave of migration to the western hemisphere in the seventeenth and eighteenth centuries.

The third period will be the "back-log building stage, during which we undertake to dam up a part of the demand goods" as a reservoir for the time when defense employment "could diminish in a degree sufficient to be dangerous to our economy and our way of life." This would come, he said, when the index had averaged 145 for two months and would call for:

1—Further credit and term restraints upon durable goods purchases and non-essential personal loans.

2—Encouragement of individual, industrial, and governmental reserves through: promotion of government savings stamps and bonds of small denominations; increased payments, extended coverage and extended time periods under our unemployment insurance laws; increased payments and extended coverage under our social security laws; medical and hospitalization insurance on a national scale for those unable to buy protection from private organizations.

3—Drastic curtailment of all governmental activities, expenditures, and loans connected with all non-defense purposes in the conventional field of private enterprise.

4—Restraints on business expansion loans for non-defense purposes.

5—Taxation for reduction of the national debt.

6—Diversion of the major portion of sales promotion and advertising expenditures to the speculative promotion of pioneer products.

They'll Do It Every Time By Jimmie Hatlo



Because the private enterprise systems will meet its severest test then, Mr. Wilson terms the final period the "free enterprise challenge stage," to be reached when the index has declined to an average of 150 for two months.

This will be the most critical stage, Mr. Wilson feels, and will call for:

1—Prayer.

2—Credit and term expansion.

3—More and better housing for more people at a price they can afford to pay, and more consumer goods of every character at lower cost.

4—Intensive sales promotion and advertising.

5—Intensification of industrial and utility modernization.

6—Conversion of surplus defense plants on private property to the production of goods for normal needs.

7—Permanent government public works.

General Electric's president has done some cogent thinking as to our future. Forewarned is forearmed.

No Relief from Relief

A YEAR ago Sidney, Ohio, an industrial town of 10,000—and the home of Copeland—was being hailed for having achieved "perfect recovery." Sidney was a vigorous, self-reliant community once more enjoying all the prosperity it had known in 1929.

True, Sidney still had 350 citizens on relief, but local boosters hoped to reach the unique distinction of completely erasing their relief rolls by May 1. Their failure is significant.

By December, 1940, Sidney's industries were employing 1,000 more men and women than in February. The national defense spurt, plus a local "City Beautification" campaign, had carried the town to a new high in prosperity. But there were still 225 persons on relief. It had required nearly 10 new jobs in private industry to take one name off federal relief in Sidney and Shelby County!

As R. L. McCormick tells the story in Nation's Business, two reasons account for this astonishing situation. First, and most important, the system under which federal aid is administered has given the country a dependent class who have taken care of themselves heretofore but now prefer to have the Government support them.

This includes those who formerly

made a satisfactory living doing odd jobs; elderly people with some savings, formerly assisted by their children or other relatives; and floaters who never intend to work at permanent jobs. All have become W.P.A. clients, not from necessity but because it is the easier course.

Second reason that relief can not be ended in Sidney is that the local authorities, although well able to care for their own charity cases, see no reason why they should do so and at the same time contribute taxes to support those of other communities not self supporting. "Emergency" relief has become permanent relief.

LETTERS

LAUER EXPLAINS YORK'S DISTRIBUTOR SET-UP

York Ice Machinery Corp.

Dear Mr. Taubeneck:

In reading the article entitled "Salesmen for Kerby Saunders Will Spread Their Efforts Over Products Big and Small" which appeared in AIR CONDITIONING & REFRIGERATION NEWS Dec. 25, 1940, my attention was directed to the following paragraph:

"The new set-up, which started operation Oct. 1, takes over the merchandising, contracting, and service formerly handled by the York branch office located in Brooklyn."

This particular statement is somewhat misleading. It implies that this newly appointed distributor is taking over our entire operation and an impression may be created in this territory, therefore, that York is closing its Brooklyn branch.

As a matter of fact, our franchise with Kerby Saunders, Inc. includes the usual products offered to a distributor paralleling Kerby Saunders, Inc. in size and organization and as established for large metropolitan areas.

As our distributor Kerby Saunders, Inc. will operate within these limits. As operators of a separate contracting business, however, Kerby Saunders, Inc., they will continue to sell and install equipment beyond the range of sizes mentioned, and like every other contractor will retain the privilege of purchasing equipment from any source they may select.

The operations of our direct factory owned and controlled Brooklyn branch will be continued and maintained for engineering, selling, installing, and servicing equipment beyond the range of sizes included in the franchise offered Kerby Saunders.

We were moved to offer you this explanation, believing that in the interests of factual reporting you might want to make a correction in the next issue of your publication.

We are sure that Kerby Saunders, Inc. who is receiving a copy of this letter, will endorse this suggestion, for a correction will serve their interests, which in a practical sense parallel our own.

Except for this single paragraph, the article was a splendid presentation, and we appreciate the prominent position you accorded the announcement and the far-reaching favorable publicity it should receive.

S. E. LAUER,
President

Refrigerated Truck Lowdown

Concern That's Tried Many Truck Units Offers Design Suggestions

OMAHA, Neb.—The great advance in trucking refrigeration, from the ice and brine methods to the use of mechanical refrigeration units, is well demonstrated by the experience of the Watson Brothers Transportation Co., Inc., of Omaha, which specializes in the hauling of meat and perishables. The company operates 500 units, many of which are equipped with refrigeration systems, and one of the most successful units mounted on company trailers is the gas engine driven Ice-O-Matic compressor unit mounted underneath the truck.

"The rapid strides made in dependable truck refrigeration have been a great asset and boon to the trucking industry," declared L. E. Erlewine, company official. "Equipment and methods today have proved so reliable in continuous cooling qualities on a modern trailer body that it is common routine for one of our mechanical refrigeration units to keep freezing temperatures continuously on a refrigerated trailer body without a moment's let-up for over 2,000 miles of travel."

22 MECHANICAL UNITS

Mr. Erlewine pointed out that his company has experimented to considerable degree on various truck refrigeration methods and equipment during its 15 years of existence. Today most of the company's trailer units have refrigeration bodies and 22 of these units have some form of mechanical refrigeration.

Early type refrigerating units used by the company employed the brine circulating method designed by the company, with ice bunkers in the round nose and hatch in the top of the cab. Engine and circulating pump were mounted under the trailer side, with coils down the side of the body. Learning from experience, the company has found that better results are secured in modern equipment with central or compact unit of the blower type. The old ice-consuming type not only lacks certain advantages but is less economical to operate, the company found.

Mr. Erlewine declared that the company's present full mechanical units are regarded as the most economical and practical in the field today. Some of these have been in operation 18 months.

FAULTS OF BRINE TYPE

"This unit has a wide range of advantages over ice," he stated. "One big failing in the old type was the deterioration of trailer bodies due to salt brine. Time formerly consumed in cleaning out bunks, icing and re-icing, is eliminated, and load space occupied by the former ice bunks is conserved for profitable use. Most important, the expense of ice consumption is eliminated."

The company has found that trailers of the circulating brine type require from 1,000 to 1,500 lbs. of ice and about 4 gallons of gas for the engine in a run between Omaha and Chicago. The full mechanical type, which requires no ice, makes the run on between 5 and 7 gallons of gas, while all ice troubles and expenses are eliminated.

Mr. Erlewine reports that his company has never had any trouble with refrigerant line breakage and condenser difficulties on certain mechanical refrigerating units, which has been given by some truckers as a reason for refraining from installing such systems. He thinks the most of these troubles are due to improper installation.

Mr. Erlewine personally designed the method of installation which has given excellent results with his company. The unit is an Ice-O-Matic model F-150 series, with a 4-hp. Briggs and Stratton gas engine, driven by three V-type belts and condenser fan driven from the engine crankshaft.

6 POTENT SUGGESTIONS

Some of the things the Watson company has learned in regard to truck refrigeration which will be of interest to others engaged in refrigerated hauling:

1. Large coil and fan capacity are very essential in truck refrigeration. Coils on the Watson units are of the fin type, with six turns of 1/2-inch tubing, controlled by expansion valves. Return lines are of 5/8-inch tubing connected directly to the unit, no flexible lines being used. Temperature indicator is placed hanging from center of ceiling and can be buttoned to ceiling while loading. Gas tank holds 7 gallons, and housing and grille shield the unit from mud, etc., when the truck is in motion.

2. An advantage of the engine-driven unit is that it is self-contained and provided with a sliding base, whereby the engine may be moved toward the compressor to slacken the belts and permit the cranking of the engine without compressor load.

3. Although similar installations are made in round nosed trailers, Mr. Erlewine has found the location underneath gives better condenser performance, due to the accessibility of air to condenser as well as to engine while in motion or standing still.

4. On the company's circulating brine jobs, on which are used either Johnson or Briggs and Stratton engines of 3/4 hp., it has been found to be good policy to keep an extra engine on hand so there will be no delay if one engine goes out of commission.

5. Baffle plates over coil where no blower or fan is used will induce circulation around coil, giving considerably more refrigeration performance.

6. Coils should be spaced at least 7/8 of an inch from trailer wall to insure circulation. Extreme caution should be taken in running high and low side lines in a full mechanical unit. All of the company's lines are run in asbestos covering or conduit to insure against any rubbing or chafing of body. Lines also are covered in sheet steel housing as a protection against freight handling contacts.

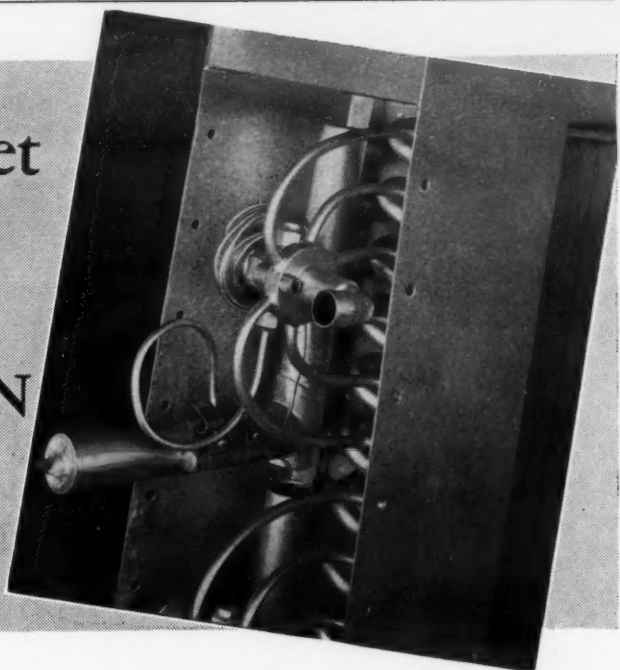
A typical run of a Watson refrigerator truck would be out of Omaha loaded with hanging beef for Chicago; loaded out of Chicago with butter for Denver; out of Denver it picks up eggs and frozen poultry at McCook, Neb., for Chicago. This unit provides continuous refrigerating service for more than 2,000 miles.

Norge Western Sales Heads At Indianapolis Showing

INDIANAPOLIS—Open house was held recently by the Gibson Co., Norge distributor for Indiana, in order to show its dealers the 1941 Norge line of refrigerators, ranges, and laundry equipment.

George Pizarro, Norge's western sales manager, and E. R. Bridges, sales manager for Norge laundry equipment, assisted Charles E. Bolton, specialties division manager of the Gibson Co. in staging this affair.

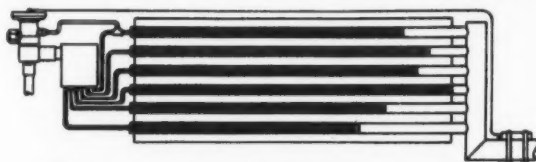
ALCO Multi-Outlet
Thermo Values
offer
BETTER DISTRIBUTION
and Insure
FULL COIL CAPACITY



**Use ALL the
Coil Surface You Buy!**

Have you ever installed a larger coil to get capacity when the original coil had plenty of surface? Chances are the trouble was poor distribution. If refrigerant had been distributed evenly to every circuit, the original coil would have had plenty of capacity.

Many jobs are in operation on which the refrigerant is short circuiting through a few circuits and is affecting the thermo valve bulb so that the valve remains choked off. This means

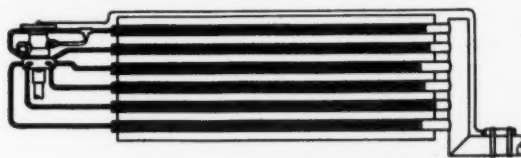


Refrigerant distribution with conventional distributor header and single outlet thermo valve. Note wide variation in refrigerant distribution and wasted coil surface.

that often as little as 50 per cent of some of the circuits are doing any real work.

ALCO Multi-outlet valves increase coil capacity

as much as 25 per cent because they provide better distribution of refrigerant than is possible with ordinary distributors.



Refrigerant distribution with ALCO Multi-outlet thermo valve. Note refrigerant is distributed equally and entire coil surface is utilized.

Distribution takes place within the valve body, at the point of expansion and before separation of gas and liquid occurs.

With ALCO Multi-outlet thermo valves the feed to each circuit is equal and direct and distribution is not affected by load changes.

To get what you pay for—be sure that all of your coil surface is working—specify ALCO Multi-outlet valves.

ALCO VALVE COMPANY

2620 Big Bend Blvd.

St. Louis, Missouri

New York • Chicago • San Francisco • Los Angeles • Seattle



Engineered Refrigerant Controls

FOR HIGHEST EVAPORATOR EFFICIENCY

Household and Commercial Refrigerator Sales At High Levels In Dallas Area

DALLAS, Tex.—A total of 9,965 household refrigerators valued at \$1,793,700 were sold by dealers in the territory of Dallas Power & Light Co. during the first 11 months of last year. Only 45 ranges and nine water heaters were sold during this period, however.

In the commercial field, 248 refrigerators and display cases were sold, along with 188 water and beverage coolers and 96 ice cream and frozen food cabinets.

Sixty-one domestic room coolers were sold between January and November, compared with 48 self-contained commercial cooling units. Nineteen commercial air conditioning systems were installed.

Commercial sales for the month were: refrigerators and display cases—24 units, \$10,535; ice cream and frozen food cabinets—2 units, \$700; water and beverage coolers—

19 units, \$13,992; air conditioning units—2 units, \$185; evaporative coolers—13 units, \$1,950.

Appliance	Unit Sales	Dollar Volume
Household		
Refrigerators	9,965	\$1,793,700
Ranges	45	6,750
Water Heaters	9	900
Dishwashers	39	5,850
Space Heaters	620	1,240
Air Conditioning Units	61	18,300
Air Conditioning Systems	11	51,500
Evaporative Cooling Systems	161	20,125
Attic Ventilating Systems	840	168,000
Commercial		
Refrigerators and Display Cases	248	153,640
Water and Beverage Coolers	188	114,193
Ice Cream and Frozen Food Cabinets	96	30,119
Air Conditioning Units	48	17,279
Air Conditioning Systems	19	35,890
Evaporative Coolers	488	82,329

Westinghouse '40 Orders Pass \$400 Million

EAST PITTSBURGH, Pa.—With orders booked in December totaling \$49,197,370, Westinghouse Electric & Mfg. Co. orders of \$400,477,724 for the year were the highest in the company's history, according to A. W. Robertson, chairman of the board. This figure marks an increase of 86.9% over 1939, when orders totaled \$214,239,044.

Sales billed for 1940 were \$239,431,447, compared with \$176,858,811 for 1939. Sales billed in December were \$22,276,781, compared with \$16,037,096 in December, 1939, an increase of 38.9%.

Net income for 1940 was \$18,985,428, compared with \$13,854,365 for 1939, an increase of 37%. Unfilled orders on Dec. 31 were \$223,685,737, as compared with \$70,821,960 at the end of 1939. A dividend of \$1 per share of both common and preferred stock was declared.

DUPONT
REG. U.S. PAT. OFF.

Artic
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The Preferred METHYL CHLORIDE
for Service Work

**SERVICE MEN profit
through du Pont's Research
and Technical Assistance**

Prompt Shipments Coast-to-Coast Distribution

DUPONT
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For information about nearest source of supply, write to:

THE R. & H. CHEMICALS DEPARTMENT
E. I. DU PONT DE NEMOURS & CO. (INC.)
Wilmington, Delaware
or National Ammonia Division
Frankford P. O. Philadelphia, Pa.

'Auction Block' Clears Out Obsolete Items



Los Angeles Jobber Takes 'Secret Bids' To Stir Interest In Moving Old Stock

LOS ANGELES—To whip up interest in its sale of obsolete materials and items no longer generally carried in stock, Refrigeration Service, Inc., local refrigeration parts and supplies jobber, set up an auction block on which one item a day was offered on a secret bid basis.

The entire sale was designed to clear up the company's shelves, prevent further depreciation losses from obsolescence, and build goodwill. The auction block angle was introduced for the purpose of creating added interest in the sale by providing a focal point about which the sale could be centered.

The plan was simple. Twelve items of merchandise were set aside, and one of these was featured each day on a prominent counter. There were no reservations of any sort, no advance bids, and no bidding by the company itself. All comers were invited to participate.

Prepared slips filled in with the name of that day's auction article and providing space for the customer's name, address, phone number, and bid were placed on the counter.

Bids were dropped into a sealed container which was opened at the end of each day. Highest bidder was notified by phone, and the result was posted on a chart captioned "What It Sold For." Date, name of article, original net price, and highest bid price were all recorded on this chart, so that there would be no doubt in the minds of losing bidders.

Taken as an average, the dozen auctioned items brought between 50 and 60% of what they would have sold for at the time they were originally stocked.

Besides, they pointed out, the stunt resulted in a great amount of word-of-mouth advertising on which no definite value could be placed.

1940 Commercial Refrigeration Sales By 16 Nema Companies

The following report of commercial refrigeration equipment sales for December, 1940 was made to the Commercial Refrigeration Section of the National Electrical Manufacturers Association (Nema) by the following 15 companies:

Baker Ice Machine Co., Inc., Brunner Mfg. Co., Carrier Corp., Crosley Corp., Frigidaire Div. General Motors Corp., General Electric Co., Gibson Electric Refrigerator Co., Kelvinator Div. Nash-Kelvinator Corp., Merchant & Evans Co.,

Norge Div. Borg-Warner Corp., Servel Inc., Universal Cooler Corp., Vilter Mfg. Co., Westinghouse Electric & Mfg. Co., and York Ice Machinery Corp.

SALES FOR THE YEAR 1940		Domestic		Canadian		Other Foreign		Total World	
		Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
1. Bottle Water Coolers—Complete.....	3,031	\$ 212,634	43	\$ 3,105	229	\$ 16,613	3,303	\$ 232,352	
2. Pressure Water Coolers—Complete.....	20,801	2,104,560	238	22,572	1,073	111,138	22,112	2,238,270	
3. Water Coolers—Low Side Only.....	851	75,133	12	554	30	1,543	893	77,230	
4. Ice Cream Cabinets—Complete.....	33,413	5,180,818	1,420	232,901	620	91,814	35,453	5,515,533	
5. Ice Cream Holding Cabinets Only (Remote).....	2,019	302,752	38	5,131	22	3,041	2,079	310,924	
6. Bottle Beverage Coolers—Complete.....	46,131	4,323,558	5,296	428,961	887	103,737	52,314	4,856,256	
7. Beverage Coolers (No High Sides).....	648	60,902	16	1,127	16	1,204	680	63,233	
8. Milk Coolers—Complete.....	71	11,152	....	....	6	1,259	77	12,411	
9. Milk Cooling Cabinets (No High Sides).....	633	30,098	....	....	....	....	633	30,098	
10. Commercial Evaporators—Not Reported Above (Including Cold Diffusers, Brine, and Other Spray Evaporators, Etc.).....	23,445	1,150,249	3,712	109,617	3,356	191,342	30,513	1,451,206	
11. Condensing Units Less Than 1/2 Hp.....	33,898	1,425,526	921	40,795	3,641	150,291	38,460	1,616,612	
12. Condensing Units—1/2 Hp.....	30,120	1,762,316	567	36,017	2,778	126,017	33,465	1,924,350	
13. Condensing Units—3/4 Hp.....	17,323	1,468,962	590	50,188	1,321	112,776	19,234	1,631,926	
14. Condensing Units—1 Hp.....	10,040	1,093,309	307	33,583	544	59,123	10,891	1,186,015	
15. Condensing Units—1 1/2 Hp.....	5,864	801,299	148	20,415	473	67,202	6,485	888,916	
16. Condensing Units—2 Hp.....	2,951	513,189	101	17,338	424	74,769	3,476	605,296	
17. Condensing Units—3 Hp.....	1,795	381,288	57	12,508	265	53,864	2,117	447,660	
18. Condensing Units—4 Hp.....	936	262,245	17	3,069	262	45,664	1,215	310,978	
19. Condensing Units—5 Hp.....	481	191,527	15	5,255	58	25,610	554	222,392	
20. Condensing Units—7 1/2 Hp.....	226	150,000	2	1,069	20	10,734	248	161,803	
21. Condensing Units—10 Hp.....	111	86,033	2	1,216	12	8,257	125	95,506	
22. Condensing Units—15 Hp.....	146	146,313	....	....	7	5,740	153	152,063	
23. Condensing Units—20 Hp.....	32	35,723	....	....	4	11,581	36	47,304	
24. Condensing Units—25 Hp.....	1	1,830	....	....	3	3,309	4	5,139	
25. Condensing Units—30 Hp.....	14	28,530	....	....	2	3,313	16	31,843	
26. Condensing Units—40 Hp.....	62	112,771	....	....	3	8,460	65	121,231	
27. Condensing Units—50 Hp.....	38	103,223	....	....	3	5,703	41	108,926	
28. Total—All Condensing Units (11 to 27).....	104,038	8,564,084	2,727	221,453	9,820	772,413	116,585	9,557,950	
29a. Condensers—Sold Separately Shell & Coil or Shell & Tube.....	17	3,058	....	....	13	10,763	30	13,821	
29b. Evaporative Type.....	56	24,634	....	....	12	5,691	68	30,325	
30. Total—All Commercial Refrigeration.....	....	\$22,053,632	....	\$1,025,421	....	\$1,310,558	....	\$24,389,611	

December Nema Commercial Sales Near 15,000 Unit Mark

SALES FOR DECEMBER, 1940		Domestic		Canadian		Other Foreign		Total World	
		Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
1. Bottle Water Coolers—Complete.....	127	\$ 9,541	5	\$ 380	17	\$ 1,282	149	\$ 11,203	
2. Pressure Water Coolers—Complete.....	1,127	125,278	5	462	76	9,551	1,208	135,291	
3. Water Coolers—Low Side Only.....	20	2,014	....	....	....	....	20	2,014	
4. Ice Cream Cabinets—Complete.....	1,397	203,915	106	19,461	27	4,411	1,530	227,787	
5. Ice Cream Holding Cabinets Only (Remote).....	82	12,613	3	217	....	....	85	12,830	
6. Bottle Beverage Coolers—Complete.....	2,453*	216,589*	1,652	137,167	46	5,761	4,151	359,517	
7. Beverage Coolers (No High Sides).....	26	3,115	....	....	....	....	26	3,115	
8. Milk Coolers—Complete.....	....	....	....	....	....	....	....	....
9. Milk Cooling Cabinets (No High Sides).....	16	779	....	....	....	....	16	779	
10. Commercial Evaporators—Not Reported Above (Including Cold Diffusers, Brine, and Other Spray Evaporators, Etc.).....	1,544	80,761	202	5,811	253	31,318	1,999	117,890	
11. Condensing Units Less Than 1/2 Hp.....	2,208	82,215	37	1,604	218	10,622	2,463	94,441	
12. Condensing Units—1/2 Hp.....	1,898	98,611	21	1,368	120	7,414	2,039	107,393	
13. Condensing Units—3/4 Hp.....	846	72,829	35	3,112	148	12,791	1,029	88,732	
14. Condensing Units—1 Hp.....	533	53,757*	14	1,519	35	3,743	582	59,019	
15. Condensing Units—1 1/2 Hp.....	254	35,628	4	556	49	6,826	307	43,010	
16. Condensing Units—2 Hp.....	176	31,801	9	1,584	97	17,791	282	51,176	
17. Condensing Units—3 Hp.....	87	20,504	5	1,147	27	5,171	119	26,822	
18. Condensing Units—4 Hp.....	36	10,521	2	320	22	4,639	60	15,480	
19. Condensing Units—5 Hp.....	16	6,605	1	337	9	4,935	26	11,877	
20. Condensing Units—7 1/2 Hp.....	35	25,671	....	....	....	....	35	25,671	
21. Condensing Units—10 Hp.....	6	3,167	....	....	1	612	7	3,779	
22. Condensing Units—15 Hp.....	70	84,685	....	....	....	....	70	84,685	
23. Condensing Units—20 Hp.....	6	3,578	....	....	1	2,701	7	6,279	
24. Condensing Units—25 Hp.....	1	1,830	....	....	....	....	1	1,830	
25. Condensing Units—30 Hp.....	2	3,656	....	....	....	....	2	3,656	
26. Condensing Units—40 Hp.....	44	77,798	....	....	2	6,168	46	83,966	
27. Condensing Units—50 Hp.....	30	80,793	....	....	....	....	30	80,793	
28. Total—All Condensing Units (11 to 27).....	6,248	693,649	128	11,547	729	83,413	7,105	788,609	
29a. Condensers—Sold Separately Shell & Coil or Shell & Tube.....	....	....	....	....	5	1,237	5	1,237	
29b. Evaporative Type.....	2	2,227	....	....	....	....	2	2,227	
30. Total—All Commercial Refrigeration.....	....	\$1,350,481	....	\$175,045	....	\$136,973	....	\$1,662,499	

*Includes sales and credits.

STREAMLINE PRODUCTS

TRADE MARK REG. U. S. PAT. OFFICE

These METAL CAPS

ON STREAMLINE

"SOLDER SEALED"

HARD COPPER TUBING

PERFORM A MULTIPLE

Service...

Here are a few advantages:

Our method of sealing carefully cleaned and dried copper tubing with a soldered copper cap was chosen because we consider it superior to any other method in general use.

This cap is substantial enough to resist fracture, damage or accidental tearing off through handling, unless subjected to extraordinary abuse.

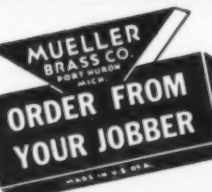
It amply protects the ends of the pipe from damage and preserves its careful capillary tolerance so that it arrives at its destination in the same perfect condition as it left the factory.

The cap cannot be accidentally left on the pipe when installation is made—and it may be used again to reseal cut lengths of pipe. The cap can easily be removed when installing by heating it slightly with the flame of a blow torch or gas tip.

The cap is colored to indicate the different kinds of pipe as follows:

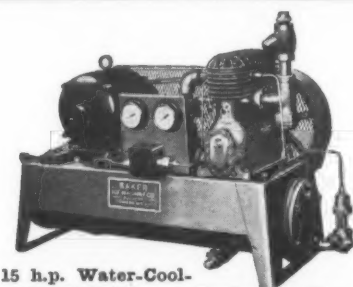
Government Type K—Green Government Type L—Copper
Government Type M—Red

MUELLER BRASS CO.

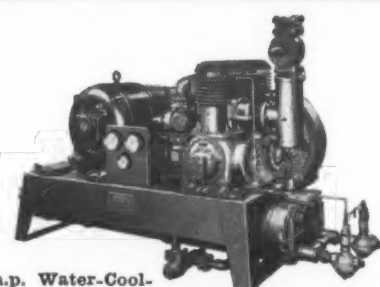


Your Jobber Has a Specialized Refrigeration Knowledge. He is at your Call to Help you Give the Utmost in Service.

PORT HURON, MICH.



15 h.p. Water-Cooled BAKER "Freon" Condensing Unit.



60 h.p. Water-Cooled BAKER "Freon" Condensing Unit.

TO MAKE BIGGER PROFITS — MAKE BIGGER INSTALLATIONS

with BAKER Commercial and Industrial Equipment

● Make your knowledge and experience pay bigger dividends by getting into the field of larger commercial and industrial installations. The BAKER franchise provides this opportunity. BAKER equipment is built specifically for such installations as meat packing plants, locker plants, breweries, bottling plants, bakeries, creameries, dairies, hotels, hospitals, stores, ships, ice plants, cold storage warehouses, etc. There's more profit

in installations of this type than in smaller installations and less competition because only a few companies manufacture equipment of this size. BAKER's national advertising campaign in leading trade journals and world-wide reputation for unusually high quality, dependability, and operating economy provide strong support for your salesmen. Write today for complete information about the BAKER franchise in your territory.

BAKER ICE MACHINE COMPANY, INC.
1506 EVANS ST.
OMAHA, NEBR.

Sales and Service in Principal Cities



AUTHORITY ON MECHANICAL COOLING FOR 35 YEARS

Good Salesmanship Spells Profit For the Service Organization

But Place the Customer's Interests Ahead
Of Your Own, Logan Tells RSES

CHICAGO — Importance of the refrigeration service man doing a good job of selling—both of himself and of his services—was impressed on members of Refrigeration Service Engineers Society at their seventh annual convention here in an address by Charles R. Logan, of Superior Valve & Fittings Co.

"Every successful man is so because he is a salesman, selling ideas, changes, and products," Mr. Logan declared, in giving his listeners a list of do's and don'ts as to the procedure to use in selling their services to their customers.

SELLING CONSIDERATIONS

"The two most important considerations in selling are: first, the purpose, and second, the object. The purpose is to supply some human need or want. Here we often overlook the fact that for every dollar expended in the supplying of these needs or wants, holding of goodwill and patronage through faultless work and attention to detail should be our prime consideration. The individual or group which places purpose first and does his work well, helps his business to serve his customers, and will prosper.

"The object of selling is to make money, and everyone connected with selling is interested in precisely that point. The man or company which places the object first, who cares nothing about his customers' interests, who thinks only of himself and his monetary gain, is doomed to disappointment and failure.

"We must understand and appreciate these two considerations, for they are quite different. We must take into our every consideration the fact that we are all paid for serving our customers and not for serving ourselves."

TYPES OF SERVICE MEN

In the refrigeration service business, Mr. Logan said, are found eight general types of service-salesmen. These he classified as follows:

1. The cock-sure, know-it-all type. He's really doing the customer a favor by calling; makes necessary many repeat service calls; causes customer dissatisfaction; material costs on jobs he handles are usually much higher than normal; he overflows with such terms as pressure differential, superheat, etc.

2. The sullen type. He can't and won't make friends for your service or for himself; antagonizes customers and other employees; never satisfied with tools or equipment; does not cooperate with other employees; feels he is much misunderstood, and in

general is his own worst enemy.

3. The hammer-and-crowbar type. In his opinion, the customer's present equipment is lousy; working conditions and location are frightful; he daily proves that the service manual and instructions are wrong; he really makes the installation unworkable, and always knows where he can get a second-hand body real cheap.

4. The "perfect" serviceman. The boss gave him the wrong address; had the office told him what the trouble was, he could have done a better job; he had a case just like that yesterday—very simple; he could fix it right now—if he had the other truck; the other servicemen in his organization are "just fair."

5. The speedy serviceman. Too busy to go into the real problem; takes the job apart and then finds that several necessary knickknacks have to be ordered from some other city; what a wild time he had last night; gives instructions to his helper and leaves—he has to take in a ball game that afternoon.

6. The general utility man; often known as a helper. It must be a very late model—he's never seen one like it before; very willing to do anything to fix it; it must be the expansion valve; there's no mention of this problem in the manual; finally goes down to his jobber for a new valve and to ask several questions.

THE SINCERE BOY . . .

7. The thoroughly sincere boy who'd like to fix it but can't figure out why it won't freeze. Takes it back to the shop; materially increases customer and company costs; goes through a process of elimination by taking the whole job apart; this usually results in a necessary bake-out job; finally resorts to the telephone, to get the boss's slant.

8. The boy who really knows his business. Works like a Trojan; tries to help all his associates; active in industry affairs; nearly loses his family, by night work, etc.; finally surrenders his job and starts a company for himself—only to be confronted with all the above ideas by all of his men.

Equally as important as the individual in the selling process are the methods employed in actual refrigeration service work, Mr. Logan continued. Under poor methods, he listed the serviceman who:

POOR METHODS

1. Does not know the field, the products, or the job. Can't get the customer's viewpoint.

2. Uses cheap, inferior parts, and products that save him temporarily 10% and later cost both him and the customer about 100%.

3. Disrupts the customer's business, his routine, his premises, and his piece of mind, resulting in loss of confidence in the original investment and the industry in general.

4. Makes unreliable promises, is discourteous, and refuses to let even the customer finish a conversation. "Let the customer talk, he's paying the bill—and a lot can be learned," Mr. Logan said.

5. Lags behind developments in the industry, which he could easily correct by reading various trade publications, courses, and reviewing manufacturers' literature.

6. Leaves the jobs half finished, and renders unusable the customer's other services—water, light, drain, etc.

7. Sanctions shady deals—such as repainting and redecorating of units or cabinets without a thorough overhaul. Undersizes capacity of coils, motors, etc.

8. Leaves the job dirty, unbalanced, noisy, etc., without informing the customer of the reason, or his prospective return.

PROPER METHODS

Proper methods, Mr. Logan said, are typified by the man who:

1. Calls as promised, introduces himself, repeats his name clearly, and presents a card showing his company name, address, and tele-

phone number. This card also should have the serviceman's own name on it—it is a material aid to dignity and stability.

2. Advertisements, truck, stationery, clothes, the voice that answers the telephone—in fact the entire first impression the customer gets is important. It is not necessary to have the latest style—but the serviceman can appear neat, clean, and be gentlemanly. These are all a part of the service, and should receive their just consideration. One company, Mr. Logan said, has placed a large size mirror at the exit to their service department, to assist in building pride in their appearance and in the organization.

3. Do not take a chance on first impulses. Look the entire situation over carefully and make the necessary mental notes. Do not guess. It may save several hours of work.

CUT DOWN NOISES

4. Cut down any unnecessary noises. Tubing runs are to be made in workmanlike fashion, and fastened securely. Clean and polish all bright materials and do not allow dirt and dust to enter the system. Install a company nameplate, label all valves, and always install a unit above flood water level, on suitable foundations.

5. Every member of the organization, from the telephone operator to the boss, is valuable only in proportion to their ability to serve customers. "Make no mistake about this, even though you may be someone's cousin or brother," Mr. Logan said. "Have and take pride in each installation and service call you make, and especially in your workmanship. Secure the correct spell-

ing and pronunciation of names involved in each transaction.

6. "Clean up your workshop, your tool kit, your tools—and above all, buy good tools, the same as you do with materials. You're not dealing with 'five-and-ten' items—these installations run well into the several hundreds of dollars. Lay out your shop for greatest efficiency, and recondition it and your old jobs in off times and off seasons.

7. "Prepare an album of pictures of your installations and use these to sell others on your type of service. Some of your customers may even clean up their old cellars when they realize that you are having a photo made. Call customers down to thoroughly inspect your job. Phone them in about a month, and inquire about the job—you'll find they have several prospects to give you.

8. "Your customers will pay you well for this type of service," Mr. Logan concluded. "I realize you'll run across many of the opposite type, but then, who doesn't? Leave the job cleaned and polished, and with a check in hand—for after the inspection is the time to present your bill. Remember—it is their dollars that pay for the job—and it is their dollars that pay you."

Dayton RSES Members Visit Dayton Rubber Plant

DAYTON, Ohio—Sixty-five members of the Dayton chapter of Refrigeration Service Engineers Society were guests of Dayton Rubber Mfg. Co., manufacturer of V-belts, at a dinner and plant inspection tour on Jan. 23.

1,000 Refrigerator Cars Ordered by P.F.E.

SAN FRANCISCO — Purchase of 1,000 new refrigerator cars and plans for the rebuilding and heavy repair of more than 3,000 units in its fleet at a cost of approximately \$15,500,000, were announced here by Pacific Fruit Express Co. for its 1941 improvement program.

New cars will cost about \$4,500,000. Orders for their construction have been placed with Pacific Car & Foundry Co., Renton, Wash. Car maintenance program calls for an expenditure of about \$11,000,000, and will include the cost of rebuilding 2,000 cars in the first half of the year, reconstruction providing for entirely new car bodies and latest type air brakes.

Value of Cooling Products In 1939 Below 1937

WASHINGTON, D. C.—Manufacturers of domestic refrigerators (mechanical and absorption), refrigeration machinery and equipment, and complete air conditioning units—there were 309 in 1939 as compared with 280 in 1937—reported total value of products for 1939 of \$278,645,540, a drop of 23.4% from 1937, according to statistics compiled by the bureau of the census.

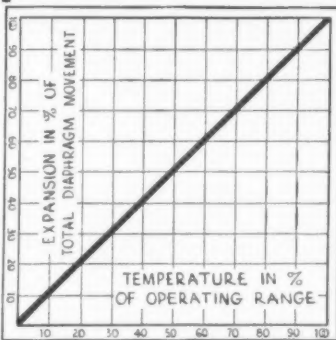
Wage earners engaged primarily in manufacturing in this industry in 1939 numbered 35,160, a decrease of 30.5% from 1937, while their wages, \$48,391,944, were 32.2% under 1937.

YOU NEED A STRAIGHT EDGE TO DRAW A STRAIGHT LINE



YOU NEED
Hydraulic-Action

FOR ACCURATE TEMPERATURE CONTROL...



The uniform expansion responsible for the extreme accuracy of Hydraulic-Action Controls throughout their entire operating range is shown in the above straight-line expansion curve of the solid liquid charge.

Type 1609 Hydraulic-Action Temperature Control, has key (screw-driver) adjustment. Broad range of -20° to $+50^{\circ}$ Fahrenheit and adjustable differential of 3 to 25 degrees, make this control suited to a wide variety of applications.



Refrigeration men everywhere are turning to the White-Rodgers Hydraulic-Action principle of temperature control to safeguard the performance of their equipment! They know that the powerful, uniform expansion and contraction of a "solid liquid" charge against a stainless steel diaphragm, combined with the mechanical simplicity of White-Rodgers Hydraulic-Action Controls assures them of:

Rapid response

Ease of setting

Accuracy of performance

Simplicity of mounting

High electrical rating

Trouble-free switch

operation

Improved appearance

You, too, will find it pays to know all about the complete line of White-Rodgers Hydraulic-Action Temperature Controls. Send for your copy of the new White-Rodgers Condensed Catalog today and see for yourself, the many advantages of Hydraulic Action.

WHITE-RODGERS ELECTRIC CO.

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Controls for Refrigeration • Heating • Air-Conditioning

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CUSTOMERS

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The market for "packaged" air conditioning is almost unlimited.

But no sale is better than the unit you sell! It will pay you to investigate the GR-Lipman line. We have a liberal sales franchise . . . and equipment that is unexcelled. Write for details.

GENERAL REFRIGERATION DIVISION
Yates-American Machine Co.
Dept. AC-2, Beloit, Wisconsin

100,000 Lockers Added In '40, U. S. Says

WASHINGTON, D. C.—More than 1,000,000 frozen food lockers in 3,200 plants now exist in this country as a result of the addition of some 100,000 lockers last year, according to a survey which was completed recently by the Farm Credit Administration.

Leading states, in order of the number of plants in operation, are Iowa, Washington, Minnesota, and Wisconsin. The industry is now expanding rapidly in several southern states, the survey showed, notably Texas, Tennessee, Mississippi, and Alabama.

The report also revealed a trend toward ownership of plants by individuals rather than ownership by corporations.

It is estimated that today about one-half of all plants in operation are individually owned. Statistics show that commercial corporations own 22% of the plants, partnerships own 16%, and cooperatives own 14% of the plants.

Fedders Officials Predict 20% Sales Rise At Company's Annual Sales Convention

BUFFALO—A 20% increase in 1941 sales of the company's refrigeration products was predicted by Theodore C. Fedders, vice president and general manager of the Fedders Mfg. Co., Inc., at the company's forty-fifth anniversary national sales convention in the Hotel Statler here recently.

Branch managers and representatives from all sections of the United States and Canada attended the convention, which was held under the direction of William D. Keefe, sales and advertising manager.

"Our refrigeration division," Mr. Fedders said, "has created a new industry for Buffalo. This, together with our other lines of heating and air conditioning equipment, automotive and aircraft radiators and other defense equipment, gives promise of heavy and continuous production throughout the year."

A display of the 1941 line of electric refrigeration products, given in connection with the sales meeting, was open to the public and some 400 Buffalo citizens came in to view the products.

Joseph M. Heimerl, director of purchases and materials, outlined company policies with respect to procurement of materials. "With defense as the springboard, the material requirements of all industry literally have swamped the mills and factories," Mr. Heimerl said. He added that while the company is having some difficulty in obtaining materials, "our suppliers are doing

their best to cooperate with us, particularly because we schedule our needs well in advance."

Other Fedders executives and staff men who spoke during the convention included Warren E. Detenbeck, secretary and factory manager; Joseph A. Askin, chief engineer, and B. B. Rhodes, assistant engineer.

Fedders branch managers here for the convention included: Austin Brown of Atlanta; Norman Honecker of Boston; Marc Shantz of Chicago; Henry Sherman of Cincinnati; Horace Schmidt of Dallas, Tex.; Jack Dannels of New York City; and Herbert C. Hoover of Philadelphia.

Also in the program were John A. Spraggon, manager, and Frank E. Heikkila, district sales manager of the fractional horsepower motor division of Westinghouse Electric & Mfg. Co., and George C. Hench, general sales manager of the Northern Indiana Brass Corp.

Postcard Pictures Used To Promote Locker Plants

DALLAS, Tex.—Postcard size, glossy finished cards showing photographs made in a locker plant installed by the company, have been highly effective in bringing inquiries from prospective builders of such plants, reports H. W. Cline of Southern Refrigeration Co., Carrier commercial dealership. The pictures employed show the locker room, the aging room, and the refrigerating units. Several thousand cards have been distributed in a direct mail campaign.

Rosnell Representing Texas In Chicago

CHICAGO—J. E. Rosnell, formerly connected with the technical division of the Texas Co. in New York City, has been assigned to represent that division in the firm's new Chicago office at 332 S. Michigan Blvd.

Announcing! New Low Prices on HOTPOINT CALROD ELECTRIC RANGE REPLACEMENT UNITS!



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A minimum number of adapter rings fit practically all makes of electric ranges. Benefit by this low investment. Cut inventory. Increase your turnover and make good profits!

2½ Million Electric Ranges Need Modernization

Get in on this rich market which Hotpoint Calrod opens for you with the 2-Way Profit Plan!

1. Modernize Old Electric Ranges
 2. Sell New Hotpoint Electric Ranges
- With the sensational new price reductions, you can cash in on the public interest in "Measured Heat" cooking. Call your distributor or Hotpoint district representative now. Edison General Electric Appliance Co., Inc., 5632 W. Taylor St., Chicago, Ill.



Hotpoint Calrod
ELECTRIC RANGE SURFACE UNITS WITH INCONEL SHEATH AND BUSHING GLASS-SEALED TERMINALS

Fedders Turns Up Some 'New Tricks'



William D. "Bill" Keefe, sales manager for Fedders, talks about plans for tapping an expanding market with an expanded line of products. At his left are Warren E. Detenbeck, secretary, and C. W. Fedders.



When the time for fun comes around "Bill" Keefe again takes a leading role, cooperating willingly with George Hench, sales manager of Northern Indiana Brass Co., in a magician's stunt.

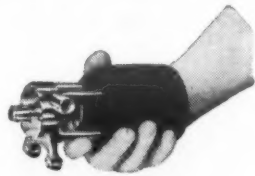


Theodore C. Fedders (left) looks skeptical as he plays foil for Mr. Hench's sleight-of-hand trick. Charlie Hall of American Radiator (center) tries to follow it.

MIDGETS IN SIZE - GIANTS IN PERFORMANCE

Eastern Midget Pumps stand alone in their field for performance where light weight and small space are factors. They outperform pumps of much greater size and weight, and stand up under severest conditions. Available in chromium plated bronze, Monel metal, stainless steel and other special alloys as required.

Model E, illustrated, is a new development, especially adapted to air conditioning and refrigeration service.



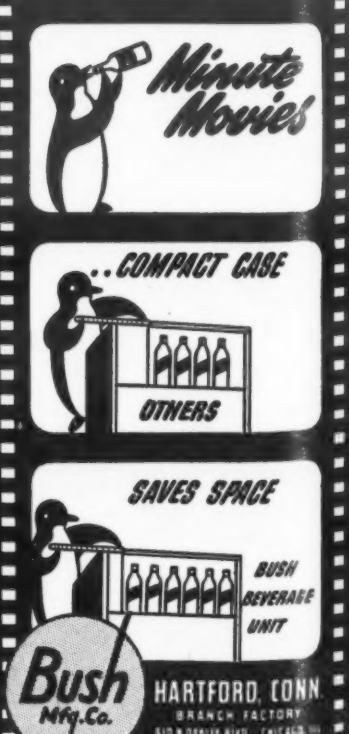
Model E For continuous heavy duty
Type: Centrifugal
Size: 6 3/4 x 3 3/4 x 3
Weight: 6 lbs. 1/20 HP fan-cooled Universal motor, 115 volts, D.C. or 25-60 cycles A.C.
Maximum capacity 7 1/2 gals. per minute
Maximum pressure 20-25 lbs. per square inch
Chromium plated bronze, \$26.50
Monel metal or stainless steel, \$29.50.

Send for our Midget Pump Catalog describing our entire line of Midget Pumps, and giving full specifications and performance charts.

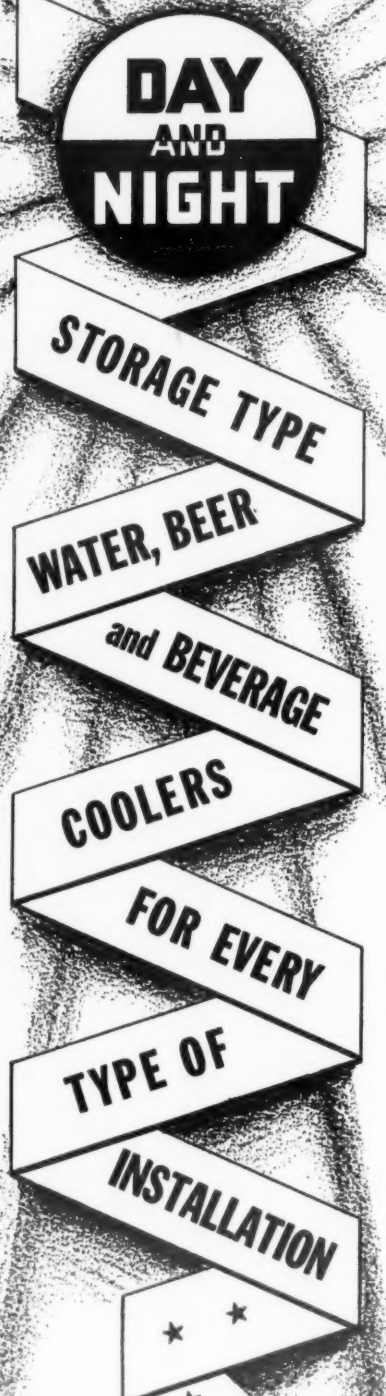
EASTERN ENGINEERING CO.
63 Fox St., New Haven, Conn.

Crevasse Heads Florida G-E Supply Co. District

ATLANTA—J. N. Crevasse, who for the past five years has been Jacksonville branch manager for General Electric Supply Corp., has been named sales manager in charge of the southeastern district. H. B. Zimmerman becomes manager of the Jacksonville branch.



Minute Movies
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SAVES SPACE
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STORAGE TYPE
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FOR EVERY
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Philco brings you a new source of year 'round profits... a Room Ventilator priced lower than ever offered before! Based on an entirely new engineering principle that gives it all the efficiency of units costing twice as much!

- Brings in Fresh, Clean, Filtered Air... 475 Cubic Feet Per Minute.
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*Price Slightly Higher Denver and West

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Please send me full details of your dealer franchise proposition on the new Philco Room Ventilator, together with Discounts and your Special Wholesale Credit Terms and descriptive literature.

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Warehouse Stocks at Convenient Shipping Points

Engineers See the Light—In Refrigeration Controls



Headline act in Penn Electric Switch Co.'s road-show to explain more fully to engineers the operation and use of controls and switches is R. H. Luscombe's demonstration with electrically lighted diagrams of how a two-fixture commercial refrigeration system operates. Parts and supplies wholesalers are sponsoring the meetings.

Penn Uses 'Bag of Tricks' To Demonstrate How Refrigeration Controls Operate

CINCINNATI—Use of giant cut-away models, a lighted and functioning demonstration board, and slide films livened the discussion of a complicated subject when a large group of service engineers attended a meeting Feb. 5 for instruction in the use, construction, installation, and maintenance of electric switches and controls, conducted by the Penn Electric Switch Co.

This was the third city on the schedule of the company's educational program. The show is appearing in numerous cities this winter and spring under the direction of R. H. Luscombe, Penn sales manager. It is promoted in each community by the local jobbers handling the Penn line.

The show is a pioneer effort toward improvement of service to the consumer by education of the service engineer. The particular subject has much need of elucidation, for the simplest switch, commonly in use, which Mr. Luscombe discusses, has 97 parts packed into a few cubic inches.

Mr. Luscombe opened his illustrated talk by reminding his hearers that "electricity is a darned mysterious substance." To understand the basic control principles, that is, the fundamentals of using this mysterious substance, he briefly refreshed their minds on fundamentals.

From a comparison of electricity's flow to that of water, from high to low pressure areas, the speaker led his audience to the importance of elementary magnetism in our civilization, and showed briefly how it figured in the construction and maintenance of an effective switch. Quick "make" and "break," constant contact pressure, uniform operation, operation in any position, and long life were shown to be necessary factors.

In discussing each of these factors, Mr. Luscombe showed the necessity of sensitively gauging both switches and controls at the factory and in the field.

Different types of switch controls, and their use in varying applications, were illustrated by slide films. On the giant cutaway models, which had actual moving parts, the important features of differential adjustment were illustrated. The speaker actually made adjustments on the models with a 4-foot screwdriver. Such "down to earth" demonstration both afforded humorous moments and raised the effectiveness of the show far above that of the ordinary lecture.

The subject of water valves, a diversion from the electrical study, was a high point in the demonstration. Mr. Luscombe explained the difficulty in constructing and main-

taining the valves so that they work effectively against varying pressures, water hammer, and impurities.

The meeting was climaxed by the illustration of an entire refrigeration system in action. The system was ingeniously diagrammed on a huge board, light flowing through different colored tubes to show the action of each function in the system.

As the compressor turned, Mr. Luscombe brought each function into "action" through manual operation of a push-button switchboard, showing how each worked automatically at varying temperature and pressure requirements, or by manual adjustments. With controls placed in two refrigerated spaces, the example illustrated the spaces as for meat and vegetables, and switches in position, a clear and lucid understanding of the function of the switches was unavoidable.

A question and answer period followed the demonstration.

The show, which travels in a manner similar to that of any headliner moving from one city to another, visited Indianapolis and Dayton before coming to Cincinnati. From the latter city, it moved to Louisville and Knoxville. It is scheduled to appear in the following cities:

On Feb. 14, it will be in Atlanta, sponsored by Leo Bosarge; Feb. 17 it will be given in Columbia, S. C., and on Feb. 18 in Charlotte, S. C., sponsored in both cities by Henry V. Dick; on Feb. 19 in Raleigh, N. C.; on Feb. 21 in Norfolk; and on Feb. 24 in Richmond, Va. Dates will be announced by local jobbers for its appearance in Washington, D. C., Baltimore, Philadelphia, Wilkes-Barre, Pa., and other cities.



Mills Condensing Units
By Mills Novelty Company
4100 Fullerton Ave., Chicago, Ill.

Liner Gets Cooling For Cabins & Cargo

CHESTER, Pa.—Installation of an air conditioning system on the S.S. Rio Hudson will extend to all passenger cabins and public rooms. The ship is the first of four vessels being constructed for the Moore-McCormack lines for use in South American trade.

A Carrier central system air conditioning plant will provide cooling in summer and heating in winter to the 76 staterooms. Completely automatic, the system will permit passengers to regulate air in staterooms according to their individual taste. The air conditioning system utilizes approximately one-half of the 159 tons of refrigeration serving the ship.

Approximately 8,000 cu. ft. of refrigerated space is made available for the storage of meat, fish, ice, dairy products, vegetables, and fruits.

Another system provides conditioned air in eight cargo compartments totaling 57,000 cu. ft. Drinking water is cooled by the refrigeration system serving the ship's stores.

Air-Conditioned Ambulance Protects Patients From Temperature Changes

DALLAS, Tex.—An air conditioned ambulance has been placed in service by Sparkman-Brand, Inc., to eliminate the problem of abrupt temperature changes in moving a patient from home to a hospital. The company, which operates one of the oldest mortuaries in Dallas, was among the first in Texas to introduce air conditioning to its offices, waiting rooms, and chapel.

The air conditioning unit is located at the front of the service area in a special body built on a standard Cadillac limousine chassis. The unit is powered by an electric motor, driven by energy stored in a battery by the generator on the engine of the ambulance.

Operation of the air conditioner is simple. It is turned on or off by the driver, and when in operation is controlled by a thermostat located inside the body of the vehicle. This control may be set at the desired temperature, which is then held automatically by the air conditioning system.

The patient's section is equipped with a portable bed, with folding chairs for attendants, and with a basinet for baby patients. Interior is finished in maroon leather and chromium trim.

The air conditioned ambulance is reported to have been received with considerable enthusiasm by Dallas physicians, not only as a means of providing comfort for patients, but because of the desirability of having absolute control of temperatures when a patient is being transported from one place to another.



Cool air is introduced to the ambulance through round opening in front panel shown above. Thermostat is also seen on interior panel at left of grille.

Hagen Traces Noise To Air Movement

CAMBRIDGE, Mass.—Noise in air conditioning systems was discussed by H. F. Hagen, vice president in charge of research of the B. F. Sturtevant Co., at a recent meeting of ASH & VE here. Mr. Hagen divided noise into two classes—high frequency and low frequency noises—both caused by air movement from the fans.

High frequency sounds can usually be eliminated by lining 20 feet of the duct, from the fan outward, with acoustical material, Mr. Hagen said. Low frequency sounds are harder to locate, and often are confused with mechanical noise. They are caused by action of fan blades on the air and are often masked by normal activities in the building, he declared.

Baptists To Construct Conditioned Building

DALLAS, Tex.—Construction now is in progress on the new \$110,000 office building to house all Baptist offices of this city. The new building, located in the downtown section of Dallas, will be air conditioned throughout.

DEALERS EVERYWHERE!

Sell **DeW-Aire**

CONDITIONING UNIT

FOR YEAR 'ROUND PROFITS

Heats in the Winter . . . Cools in the Summer

Purifies the Air in all Seasons





For Homes, Stores, Theatres, etc.

Commercial Unit

This DEW-AIRE UNIT supplies both heating and cooling for commercial establishments.

DEW-AIRE is styled in 3 Beautiful Moderne designs. DEW-AIRE is easy to install. No walls or floors to be torn out. DEW-AIRE simply takes the place of unsightly radiators.

SEE THE DEW-AIRE DISPLAY—DETROIT BUILDERS' SHOW FEBRUARY 14 TO 23
The STANDARD COMPUTING SCALE CO., (Inc.) DETROIT, MICHIGAN
Air Conditioning and Refrigeration Division

Gentlemen: We are interested in receiving complete information regarding DEW-AIRE Conditioning Units.

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MAIL THIS COUPON for LITERATURE and DETAILS

"Yes sir! Sensational is a mild word to describe the DEW-AIRE Conditioning Units!"

In the Winter DEW-AIRE replaces the steam or hot water radiators and distributes the hot air where needed. In the Summer, if tap or well water is available of 60° F. or colder, sufficient refrigeration is available for COMFORT COOLING. Otherwise, STANDARD Compressors will develop from five to ten tons of refrigeration, depending on the required load. Our dealers will have the double advantage of selling and servicing all types of air conditioning installations for homes and stores as well as custom commercial and industrial installations.

DEW-AIRE will save your customers up to 25% on fuel bills alone.

TERRITORIES ARE BEING ALLOTTED TO QUALIFIED DEALERS NOW.

NEW! ENTIRELY PRE-ENGINEERED

DOME COOLER

SETS A NEW HIGH IN ALL-AROUND VALUE

Peerless
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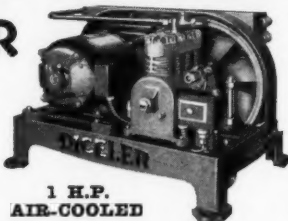
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Sell LARKIN patented continuous cross-fin coils with the imbedded fin-to-tube contacts—silver welded connections—staggered tubing for maximum heat absorption. They make you more satisfied customers—more sales and profits.

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ATLANTA, GA.*Originators of The Cross Fin Coil***DICELER 4 CYLINDER CONDENSING UNITS**

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THE CONDENSING UNIT LINE WITH EXCLUSIVE FEATURES
DEISSLER MACHINE COMPANY Greenville, Pa.
PIONEER OF FOUR CYLINDER REFRIGERATION

OUR VAST SUPPLIES ARE AS CLOSE AS YOUR MAIL BOX

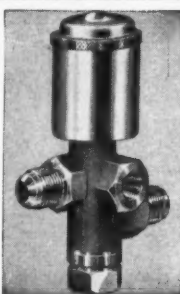
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JOIN UP WITH CHIEFTAIN
NOW FOR HEAP BIG SALES
THIS SPRING**

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TECUMSEH, MICH.

**AMINCO No. 881 Constant Pressure Valve**

A two temperature automatic valve, with built-in check. Ideal for controlling the warmer coils in multiple systems. Shuts off tight. The two-temperature valve keeps walk-in boxes at constant temperature avoiding low pull-down. Adjustable between 20 in. vacuum and 40 lb. pressure. Maintain coil pressure within a 2 lb. differential.

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HAND-WHEEL**



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**HENRY
BALANCED-ACTION
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on PROFIT POSSIBILITIES

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NORTH KANSAS CITY, MO.

Operating and Service Methods For Dry-Expansion Counter Freezers

By Arch Black and Dean C. Seitz

Editor's Note: This is one of a series of articles on the servicing of counter-type ice cream freezers, which have been appearing in the issues of AIR CONDITIONING & REFRIGERATION NEWS in the past few months.

It will form one section of a general series on the servicing of low temperature equipment in common use by the retailer.

Operating Instructions—Freez-Master and Freez-Matic**WASHING AND STERILIZING**

It is very important that the freezer, all cans, and other parts and utensils coming in contact with the mix or ice cream be thoroughly washed and sterilized before using in a manner as has been previously described as this applies to all counter freezers.

Bearing in mind the general directions which have previously been given in earlier articles, the following points should be adhered to as they apply to the Taylor Freez-Master and Freez-Matic units.

After pouring the mix into the filler hole move the automatic control knob on the right-hand side of the front plate to the "on" position. The beater motor and compressor will start and run until the knob is again moved.

When the mix is frozen to the desired consistency, move the control knob to "off."

If additional overrun is desired, move the toggle switch on the left side of the front plate to "on." The switch operates the beater motor but does not allow the compressor to operate when the automatic control is at "off." To determine the proper overrun, please refer to previous articles.

After proper freezing and whipping of the mix, resulting ice cream can be drawn from the freezer and packaged, or direct from the freezer ready for serving.

If it is desired to sell the frozen cream, malted milk, or other products direct from the freezer in a soft condition, turn the beater toggle switch to off, and set the control knob to approximately the No. 2 position. The automatic control will then cycle the compressor and beater to obtain the proper consistency. Check the cream occasionally and if more refrigeration is required move the control knob toward No. 3 position.

Once the proper position for the control knob is determined, it is necessary to change it only when making a fresh batch of cream. The toggle switch should be used to start the beater motor whenever it is desired to draw cream from the freezer.

Start knob rotates continuously with the motor driven single cam of the timer control as has been previously explained. The running part of the cycle begins when the knob is at "0." The knob may be manually set at the beginning of the running time by turning it to "0." It may also be set at the beginning of the off time by turning it counter clockwise from "0" until the motor stops. The knob should be turned in either direction and may be set at any point desired but cannot be turned in a clockwise direction past the "0" position.

HARDENING AND DISPENSING

Cream should be placed in the hardening cabinet as soon as it is drawn from the freezer and the hardening cabinet must be below 0° F. to prevent serious large ice crystal formation in the cream. A temperature of -5° F. or lower is preferred.

If the hardening temperature makes the cream too hard to dip, transfer it to a soda fountain or dispensing cabinet after it has hardened. Packages, of course, may be sold directly from the hardening cabinet.

As has been previously stated if soft ice cream is to be sold it may be sold directly from the freezer. The automatic control will maintain proper texture and consistency for hours when properly set.

If a large amount of soft cream is to be sold in a short period of time,

soft cream may be drawn into cans and the cans stored in a cabinet which should be at a temperature between plus 10° F. and plus 20° F. This permits several people to dispense cream at the same time. Such soft cream will maintain proper texture for three hours at plus 17° F. temperature.

Servicing Notes

Regular inspection will prevent most trouble and costly repairs. Checks should be made along the lines previously described for other units. Below are listed suggestions to be applied to the subject models only.

Complaint (1): Timer does not operate.

Remedy: Clean with a small brush and oil bearings with a small amount of fine oil.

Complaint (2): Freezer parts do not work freely.

Remedy: Clean them carefully and oil with a fine oil. Clean and sterilize before again using.

Complaint (3): Solenoid valve on motor operates when it normally should be off.

Remedy: (a) Check for short circuit in wiring to valve or motor. (b) Check controls governing valve or motor.

Complaint (4): Compressor does not start when mix compartment is warm and thermostat is set at normal or cold.

Remedy: (a) Check operation of thermostat of mix compartment solenoid valve by turning thermostat to off then back to normal. Solenoid valve should open with a click.

(b) Check for break or loose connection in wiring of thermostat and mix compartment solenoid.

(c) If solenoid is operating, check pressure and operation of low pressure control. If control is closed, check wiring to compressor motor.

Complaint (5): Beater motor does not operate when beater motor switch is on.

Remedy: (a) Check the power supply. (b) Check for break or loose connection in wiring and operation of switch. (c) Check for burned-out motor.

Complaint (6): Beater motor or freezer solenoid does not operate when timer control is on.

Remedy: (a) If both valve and motor do not operate, check line to timer and power supply for burned out fuses. (b) Check timer operation. (c) Check for break in wiring and burned out motor or solenoid.

Complaint (7): Refrigeration.

Remedy: Practically any of the complaints registered may indicate the refrigeration system should be carefully checked for shortage of refrigerant, stuck expansion valves, etc. Remedy should be along the same lines as that previously explained in earlier articles.

But in the case of a system such as the Freez-Master, be sure to check any trouble that may arise around the solenoid valves. If trouble is caused by stoppage at the solenoid or freezer expansion valve, suction pressure will only reduce to operating pressure in the mix compartment if the thermostat opens the mix compartment solenoid valve.

Solenoid Valve Trouble

If solenoid valve leaks, indicated by a very cold mix compartment or by freezing of drops of water in the freezer shell, pump the system down to slightly above 0 lbs., remove the valve, and clean it.

As a rule, Detroit Lubricator solenoid valves are used on these Taylor freezers and may be cleaned by unscrewing the large hex nut just under the coil housing. Be careful not to exert force on the coil housing when unscrewing the hex nut.

On some Taylor freezers, the solenoid used is that manufactured by Automatic Products and these may be cleaned by removing the large hex plug from the bottom of the valve, then unscrewing the valve seat with a socket wrench.

If solenoid valves fail to open, check for electrical trouble or remove the valves to clean out stoppage at seat.

MASTERCRAFT ADJUSTABLE PAD AND CARRYING HARNESS

Efficient, sturdy and economical. Provides safer handling and thorough protection of refrigerators, pad and harness are separate units and both adjustable to practically all styles and sizes of cabinets.

Adjustable Pad \$10.00
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each f.o.b. Chicago. Letting on pad at only \$1.00 per order extra.

Write for latest folder and prices on pads for refrigerators, washers, ironers, ranges, radios, etc.

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INCORPORATED 1921
3815-3825 Cortland Street, Chicago, Illinois

For Greater Dust Capacity,
Specify—

AIR-MAZE

Permanent Air-Filter Panels
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SPORLAN VALVES

**Food Storage Lockers
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All our energy is devoted to the development and production of lockers. Write for particulars.

Master Refrigerated Locker Systems, Inc.
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200,000 Masterbuilt Lockers in Use

DISPLAY CASES

Write for details of this sensational new 100% PORCELAIN Display Case line.

MIDWEST MFG. COMPANY
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**YOUR PROTECTION
AGAINST
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are Efficient, Sturdy and Reliable
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PENN AUTOMATIC CONTROLS AND SWITCHES

Protect the reputation of your product
Write for Catalog
PENN ELECTRIC SWITCH CO.
GOSHEN, INDIANA

Dealers Wanted for Midwestern and Southern States
CAMPBELL REFRIGERATOR CO.
Milwaukee, Wis.

Use CHICAGO SEALS
for seal replacements
A complete line in all sizes
CHICAGO SEAL CO.
20 North Wacker Dr., Chicago

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RATES: Fifty words or less in 6-point light-face type only, one insertion, \$2.00. Additional words, four cents each. Three consecutive insertions, \$5.00, additional words ten cents each.

PAYMENT in advance is required for advertising in this column.

REPLIES to advertisements with Box No. should be addressed to Air Conditioning & Refrigeration News, 5229 Cass Ave., Detroit, Mich.

POSITIONS AVAILABLE

REFRIGERATION sales engineer with practical field experience for company with international reputation manufacturing a long established line of refrigeration accessories. Applicant must live in New York Metropolitan area and cover eastern territory calling on manufacturers, jobbers, and contractors. Must have car, be free to travel, and preferably 35 to 40 years old. Reply must state age, years of experience in refrigeration industry, whether engineering or sales, whether married or single, race and religion, salary desired, extent and nature of contacts in the refrigeration industry. Moderate salary to start, with excellent future opportunity. Replies held strictly

FLOOR TYPE UNIT COOLERS

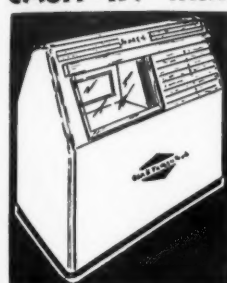
For the Larger Refrigerator

KRAMER-TRENTON CO.
TRENTON, N. J.

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JACKSON MICHIGAN
HEAT INTERCHANGERS

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QUICK FROZEN FOOD DISPLAYERS
Write for exclusive Distributor-Dealer proposition.

THE REOL COMPANY
Hearst Tower Bldg. Baltimore, Md.

KERO TEST

Valves and Fittings
The Standard of the Industry
Kerotest Manufacturing Co.
Pittsburgh, Pa.

Condensing Units for every commercial refrigeration and air conditioning requirement . . . Also packaged air conditioners.

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Established 1854
Curtis Refrigerating Machine Co.
Division of Curtis Manufacturing Co.
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Specify DAVIDSON'S SILICA GEL DRYERS
THAT BEAR THIS LABEL
Ask your Jobber

Fulco
ADJUSTABLE REFRIGERATOR COVERS
Fit any refrigerator. Excellent quality covers, well padded and reinforced at edges. Reduce loss from damage in transit to a minimum by full equipment with FULCO Adjustable Refrigerator Covers.
FULTON BAG & COTTON MILLS
Manufacturers since 1870
Atlanta St. Louis Dallas New Orleans
Minneapolis New York Kansas City, Kan.

confidential. Box 1301, Air Conditioning & Refrigeration News.

JUNIOR DESIGN Engineer and draftsman to work on electric controls for commercial refrigeration for large, responsible manufacturer. Should be creative, have electrical knowledge, and be able to work at drawing board. Prefer young man with some background in this field. Give definite experience in first letter and salary expected. Write Box 1305, Air Conditioning & Refrigeration News.

MECHANICAL Draftsmen with layout experience on household refrigerators. Permanent, attractive offer to qualified men. Give complete experience, age, salary expected, etc. in first letter. Our employees know of this "ad." Box 1307, Air Conditioning & Refrigeration News.

COMMERCIAL refrigerator manufacturer requires assistant sales manager experienced in sale of meat cases, walk-in coolers, reach-in boxes, etc. Only salesmen who have been in commercial refrigeration business and who have had experience will be considered. Give full details, including age and experience in first letter, which will be treated strictly confidentially. A personal interview will be arranged within two weeks for those whose letters look good. Write Box 1309, Air Conditioning & Refrigeration News.

ARE YOU THE MAN? We want to contact a man used to substantial earnings. He is a persistent, enthusiastic worker. Has selling ability and established contacts with refrigeration and refrigerating equipment dealers and wholesalers in his territory. To such a man we offer a part or full time connection as Manufacturer's Representative (exclusive territory). Earning possibilities limited only by the man's energy and ability. For details write THE REOL CO., Hearst Tower Bldg., Baltimore, Md.

POSITIONS WANTED

SALES EXECUTIVE, graduate of college of finance and commerce, experienced in all phases of business management but chiefly in sales management and especially in developing sales of household appliances, heating and cooling equipment and commercial refrigeration and store equipment, with good record of achievement, desires new connection with well-rated, progressive manufacturer or distributor. Box 1299, Air Conditioning & Refrigeration News.

FRANCHISES AVAILABLE

DIRECT FACTORY Connection—Sell Refrigerator Display Cases, Walk-In Coolers, Reach-In Refrigerators, Refrigerating Units, to Meat Markets, Grocers, Taverns, etc. Financing arrangements to help sell. Write for full information, or see EHRICH REFRIGERATOR MFG. CO., St. Joseph, Mo., Dept. A.

EQUIPMENT FOR SALE

ATTENTION refrigeration service repair companies—Phenomenal price reduction on brand new stainless steel domestic controls. For further information inquire by mail to JAMES SURPLUS PARTS, 211 E. 149th St., Bronx, N. Y.

REPAIR SERVICE

SAVE YOUR Trade-Ins—General Electric, Grunow, Westinghouse, Crosley, Servel, Gibson, Bohn Hermetic, etc. Complete Renovating Service, Respraying. Use our Ovens for Dehydrating, Compressors Rebuilt or Exchanged. Controls, Parts (The Hard ones to get). REFRIGERATOR SERVICE CORP., Minneapolis, Minn. Write for circular.

CONTROL REPAIR Service. Domestic controls reconditioned equal to new at a small cost. All work guaranteed for one year. Prices upon request. UNITED SPEEDOMETER REPAIR CO., INC., 342 West 70th Street, New York City.

CONTROL REPAIR service. Your controls repaired by expert mechanics, with special precision equipment. Supervised by graduate engineers. We stress perfection and dependability before price. One year guarantee on domestic controls. Any bellows operated device repaired. HALELECTRIC LABORATORY, 1793 Lakeview Road, Cleveland, Ohio.

HERMETIC REBUILDING and Exchange Service General Electric—Westinghouse—Majestic and Grunow Units, Compressors and parts. Immediate shipment. Old unit can be returned later in our crate. We also exchange floats, Evaporators, Controls. Write for price list specify S6. SERVICE PARTS CO., 1101-03 N. 24th Ave., Melrose Park, Ill.

GENERAL ELECTRIC monitor top metallic bellows repaired. Thermostats for G. E. units type DRIA, DRIE, DR2F & D2. No others. Exchange basis only. Any quantity. Send your old bellows and receive by return mail completely rebuilt bellows guaranteed for one year. \$1.00 postpaid. Instructions for installing. G. E. MONTAGUE, 113-11 200th St., St. Albans, N. Y.

MANUFACTURERS, Distributors—Attention: Our services available in New York, New Jersey, Connecticut. Specializing in installation and maintenance of low temperature applications including freezers, hardening rooms and cabinets, frosted food cabinets, and all related equipment. A reliable, capable, prompt-acting firm. J. M. WEINBERGER & CO., 32 Culver St., Yonkers, N. Y.

PATENTS

HAVE YOUR patent work done by a specialist. I have had more than 25 years' experience in refrigeration engineering. Prompt searches and reports. Reasonable fees. H. R. VAN DEVENTER (ASRE), Patent Attorney, 342 Madison Avenue, New York City.

Dealer on School Board

ANDERSON, Ind.—Glen Rogers, manager of Rogers Electric Co., local Frigidaire dealership, has been appointed to a three-year term on the Anderson School Board.

Reconditioning Firm Exports To S. America

(Concluded from Page 1, Column 2)

To meet this demand for cheaper mechanical refrigeration, Interstate Refrigerator Corp. offers, for example, a reconditioned, hermetically sealed, 4-cu. ft. G-E refrigerator, crated for export, and fully guaranteed at \$27.50. Larger models scale upward in price, but in any case, the price is considerably lower than the cost of a new refrigerator, Mr. Belasco pointed out.

"Some of our larger exporters in New York," Mr. Belasco said, "on account of a shortage of exchanges, are trying to develop a barter and exchange merchandise plan, using, because of low prices, reconditioned refrigerators as a basis of exchange. Because of the great demand for refrigeration in South America, greater than it has ever been, this barter and exchange plan will naturally do away with permits and licenses due to a shortage of dollars in South America. This plan is being developed because of the new rulings in some of the South American countries, which have tied up a great many of our American exporters in the last 10 to 12 months."

In addition to electric household refrigerators, Mr. Belasco's firm has done a considerable volume in kerosene-powered refrigerators, shipping 200 of these units to Venezuela alone.

To build up this market, Interstate Refrigerator Corp. has placed advertising and news stories in La Prensa, a Spanish-language newspaper with wide circulation in Latin America. The firm has also had many inquiries from advertising placed in AIR CONDITIONING & REFRIGERATION NEWS, Mr. Belasco stated.

Canadians Announce Plans For Show

(Concluded from Page 1, Column 4) and service salesmanship. Added attraction will be a daily "Information Please" session, at which questions pertaining to subjects covered that day will be answered.

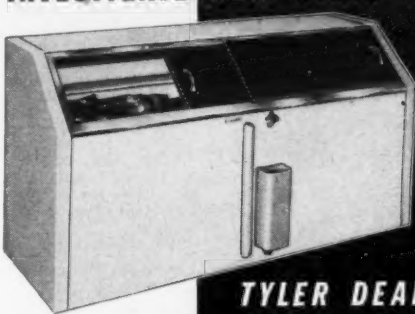
Speakers at the technical sessions will include Paul Domke of Mueller Brass Co., A. F. Sawyer of Dole Refrigeration Co., R. E. Townsend of Detroit Lubricator Co., K. M. Newcum of Superior Valve & Fittings Co., Paul Penn of Penn Electric Switch Co., E. E. Graff of Ranco, Inc., H. Parish of Kelvinator of Canada, and a factory representative of Temprite Products Corp.

Closing the convention, a banquet and dance will be held in the hotel on March 18. Registration fees will be the same as for last year's meeting—\$3 for men and \$2 for women, and covering everything on the two-day program, including the banquet and dance. Special tickets for the dance only are available at \$3 per couple.

A special invitation is being extended to refrigeration service men from the United States to attend the convention, in the interests of better service to the customer as well as for the cause of international friendship.

Officers of the Maple Leaf chapter, which is sponsoring the meeting, are: Kenneth Wood, president; H. Donnell and Jas. Spence, vice presidents; Mr. Savill, secretary; J. W. McKee, assistant secretary; G. W. Tindall, treasurer; G. Condie, assistant treasurer; and R. O. O'Connell, sergeant-at-arms.

INVESTIGATE NEW TYLER DRY-KOLD BEVERAGE COOLER



★ SALES POSSIBILITIES exist everywhere, right now, for this better, more sanitary DRY bottle cooler. The complete Tyler line for 1941 is just as up-to-the-minute and salable—with Sectional Steel Clad Walk-In Coolers, Welded Steel Reach-In Boxes and Display Cases to meet every possible need. Write TYLER FIXTURE CORPORATION, DEPT. R-1, NILES, MICHIGAN, today!

TYLER DEALERS ARE MAKING MONEY!

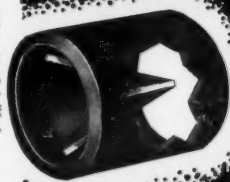
You ought to have the new **IMPERIAL INNER AND OUTER REAMER**

A convenient new tool which makes possible a rapid and efficient reaming job on both the inside and the outside edges of copper, brass or aluminum tubing. Tubing is introduced from one end of tool for inside reaming, and from the other end for outside reaming. The tool cuts in either direction and is self-centering. It has three hardened, hollow ground tool steel cutters. The cutters are protected against damage when not in use, by outside shell of tool. Body is knurled for easy handling. Handles all sizes of tubing from 3/16" O.D. to 1 1/2" O.D.

IMPERIAL BRASS MFG. CO.
565 S. Racine Ave., Chicago, Ill.

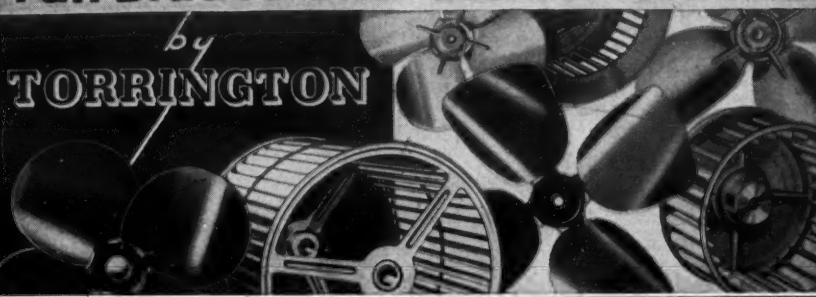
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VALVES • FITTINGS • TOOLS • STRAINERS
DEHYDRATORS • CHARGING LINES • FLOATS

No. 208-F Inner and Outer Reamer
Price, each, \$1.20

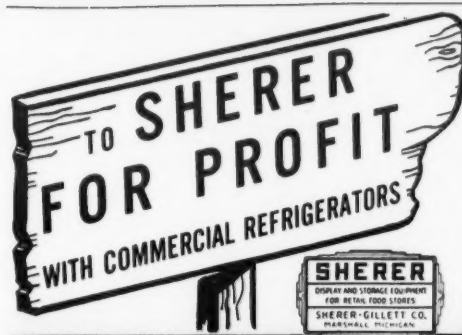


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Fan Blades and Blower Wheels



THE TORRINGTON MANUFACTURING CO. of TORRINGTON, CONNECTICUT

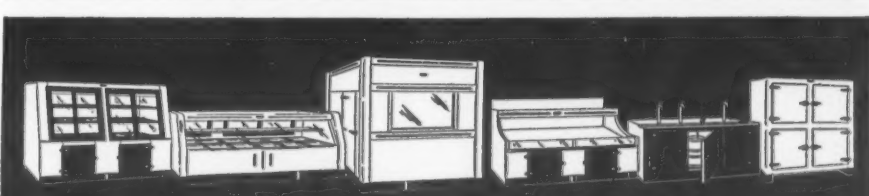


Follow the profit road with Sherer. A complete line of display and storage refrigerators and full factory cooperation makes the going easier. Write for complete franchise details.

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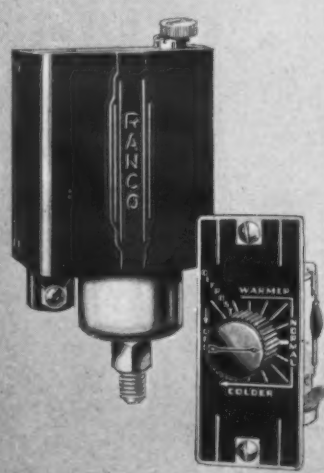
The New **POLARTRON** FOR PRESSURE CONTROL UP TO 1 H.P.A.C.
Eight Series 40 Polartron Advantages
Separate "On and Off" Knobs • Universal Range • Capillary Pressure Connections • Power Means to Start • Manual Free Service • "Coming Control" on Cut-In on Cut-Out • No Start Cooling • Positive Equipment Compressors can be Converted to Produce Frost-Free Constant Cold

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REFRIGERATION Control



"TOPS" IN QUALITY, VARIETY AND PROFIT
MAKING MONEY AND FRIENDS FOR HUNDREDS OF DEALERS EVERYWHERE
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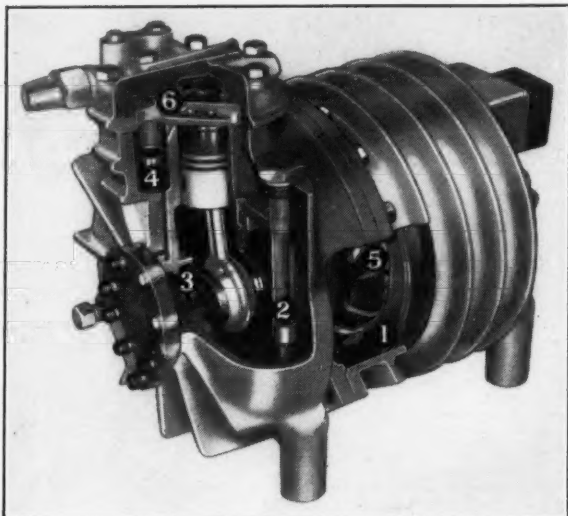
FOGEL REFRIGERATOR COMPANY Since 1899
16th & Vine Sts., Phila., Pa.



More Than 5 1/2 Million Ranco Controls are in use

Ranco INC.
COLUMBUS, OHIO, USA

'Supermetic' Features At a Glance



Design features of Servel's new Supermetic unit, shown in this cutaway view, include: 1. Oil-free motor case; 2. Sealed crankcase; 3. Forced lubrication; 4. Oil-actuated unloader; 5. Refrigerant-cooled motor; and 6. Field serviceability.

Servel 'Sealed' Unit Field Serviceable

(Concluded from Page 1, Column 4) the beginnings of Servel refrigeration history in 1921, pointing out that the company had been a pioneer in the use of oil-miscible refrigerants such as methyl chloride and the "Freon" group, and in the company's early experiments developed many design features peculiar to these refrigerants.

The "sealed crankcase" principle, utilizing a check valve for the return of oil from the suction gas and inhibiting foaming in the crankcase, was a feature of the first Servel machine built in 1921, Mr. Newcomb claimed.

"Our engineers learned a lot about the problems of building hermetically sealed units in the period from 1931 through 1934 (when the company built a household electric hermetic unit)," said Mr. Newcomb, "not only with respect to the mechanics of the unit itself, but also as to the auxiliaries which go to make up a complete system."

"We learned, for example, that an

apparently simple capillary tube, while costing less initially than an expansion valve, can vitally affect the efficiency of the unit and under unfavorable conditions create a serious field service problem.

"The capillary tube," continued the Servel executive, "may have a place in this industry, but based on our earlier experience, we designed our Supermetic with an oil-operated unloader which permits the carrying of a reserve charge, makes it possible to use the machine with any type of expansion valve, float, or capillary, and positively relieves the motor of all compression load until the motor has attained full speed." This, Mr. Newcomb contends, is insurance against frequent service calls on the critical charge type of units, and will permit successful installations under fluctuating voltage conditions.

POSITIVE LUBRICATION

Pointing out that the moving parts of a compressor operating at 1,750 r.p.m. must be insured adequate lubrication at all times, Mr. Newcomb declared that the Supermetic oil pump maintains a constant lubricating pressure of 15 to 20 lbs. per sq. in., driving the oil through a drilled eccentric shaft to main and eccentric bearings and through drilled rods to the wrist pins, besides providing a source of power for operating the oil-actuated unloader previously mentioned.

The oil in the crankcase, he said, is normally carried below the level of the eccentric rod so that it is not subjected to whipping and agitation, and is definitely partitioned out of the motor case so that the motor windings cannot be damaged by the impingement of oil spray, and motors cannot be overloaded by an oil drag between the rotor and the stator.

Concerning the serviceability of the new hermetic unit in the field, Mr. Newcomb declared:

"Any intelligent mechanic can repair or replace suction valves or discharge valves on the Supermetic as easily and as quickly as has been done on conventional machines in the past. The oil pump and, if necessary, the unloader piston, may be similarly replaced in a very few minutes."

Mr. Newcomb stressed, however, that the way in which service is to be handled (field or factory) is definitely at the option of Servel's customers, explaining that the Supermetic carries a 15-month warranty, with an added 4-year service plan on the power unit if desired.

The Servel executive reported that production is progressing satisfactorily on these new units, but that owing to the extent of changes in production facilities necessary to accommodate this type of unit and a continually increasing demand for the present conventional units, it would not be possible to engage in the unrestricted sale of Supermetic machines during 1941. At the present time, business is being solicited only from fixture manufacturers whose space facilities will accommodate only this compact type of unit.

Here's Advance Dope on How To Get Subcontracts For Defense Work

(Concluded from Page 1, Column 5) be sponsored by the Federal Reserve banking system.

Each Federal Reserve district will have a dollar-a-year "Chief," who will be a "big name" in his community, to head up its Subcontracting Service. It will have also:

(1) Specifications, blueprints, and brownprints of everything that might be manufactured by subcontractors.

(2) Technicians to give advice and assistance to potential subcontractors.

(3) A full-time production manager to keep the ball rolling.

(4) Money to lend subcontractors. Principal duty of the "Chief" will be to persuade contractors to subcontract. If his local prestige and persuasiveness fail to do the trick, "other means will be found."

Interesting note: Subcontractors are not bound by provisions of the Walsh-Healey act. Contractors are. What's the object? First of all, to get more goods in less time by utilizing existing capacities. The OPM estimates that only half the nation's machine tools are working full time. They also predict that if the subcontracting drive turns out to be as successful as they hope, the rearmament program will be speeded up by three months.

Another object is to "keep people at home," to make it unnecessary for workers to migrate.

As matters stand now, 414 "prime" contractors have 90% of the defense

contracts. It is estimated that 200,000 subcontractors could participate in the defense program.

Further reason for "sharing the work" lies in the fact that 62% of all defense contracts to date are concentrated in plants along the Atlantic seaboard, from Boston to Newport News—in a territory no larger than England! The Pacific Coast has 18% of the contracts. Thus 80% of our rearmament program is being fabricated in locations most vulnerable to attack.

The army wants this work moved inland. Subcontracting will help do the job.

What do "they say down in Washington" about Britain's chances to withstand the expected invasion this spring? Preponderance of feeling is that Britain "can take it" and hold out till we get there.

What do they say about possible labor troubles? They aren't worried so much about that, either. Great confidence is expressed in Dr. Millis, the new N.L.R.B. head, by everyone. There will be disturbances, of course, but C.I.O. leaders claim that "labor statesmanship is improving," and that they will have the situation "well in hand."

The National Labor Relations Board has made changes in its administrative organization and procedures designed to improve and speed up its operations.

A new administrative division has been set up to direct and supervise

the work of the board's 22 regional offices and to oversee the issuance of complaints and authorizations of proceedings in representation cases.

Method of reviewing records of hearings has been changed so as to throw greater responsibility on the trial examiners and review attorneys.

The new administrative division in charge of regional offices and case development will take over a part of the duties heretofore entrusted to the secretary of the board. The director of the new division will report and be responsible directly to the board and, since he will not be a subordinate of the secretary, he will have correspondingly greater authority than the chief administrative examiner has had.

Garnet L. Patterson, formerly regional director in Chicago, has been brought to Washington and placed in charge of the new division.

Mr. Patterson will have under him three or four regional coordinators each of whom will be responsible for overseeing the work of a number of regional offices. They will also upon request assist the regional directors in pressing situations and in handling special problems.

In addition to these traveling coordinators there will be under Mr. Patterson another three or four administrative examiners to handle the work of case development in Washington. A survey of the work and personnel of the regional offices has already been begun by Mr. Patterson with the assistance of a committee of regional directors.

By March 1 the board expects this survey to be completed and it may then change the boundaries of some of the regions and make such other changes as may be needed.

DEPENDABLE

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17 DIFFERENT CHECKS
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•A-P Water Regulating Valve controls flow of water for water-cooled compressors and condensing coils.

Progressive Service Engineers
Use and Recommend — and
Aggressive Jobbers Stock and
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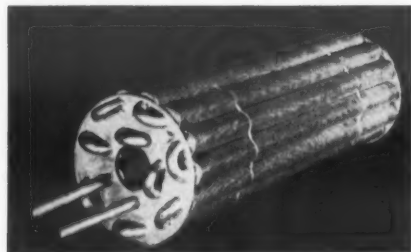
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